THE REGISTRAR GENERAL'S STATISTICAL REVIEW OF ENGLAND & WALES FOR THE TWO YEARS 1948–1949

TEXT, MEDICAL

LONDON: HER MAJESTY'S STATIONERY OFFICE

1953

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EXPLANATORY NOTES

1. Table Numbering

Of the tables referred to in this review, those numbered in Arabic numerals, will be found in "Tables, Part I—Medical", and those lettered will be found in "Tables, Part II —Civil", for the year in question, whilst those numbered in Roman numerals appear in this volume.

2. Significance Indication

Rates based upon less than 20 deaths or cases notified are distinguished by italic type as a warning to the user that the smallness of the experience may affect their significance. Rates given as 0 indicate that the rate is insignificant. A dash (—) in tables showing rates indicates that there were no deaths or cases.

3. Regions

The constitution of the Regional Divisions of England and Wales used in this volume is as follows :—

Greater London
The aggregate of the City of London and of the Boroughs and County districts falling entirely within the area of the Metropolitan Police District as defined in the Police Act, 1946.

South East
Bedfordshire.
Berkshire.
Buckinghamshire.
Essex.
Hertfordshire.
Kent.
London.
Middlesex.
Oxfordshire.
Southampton.
Surrey.
Sussex, East.
Sussex, West.
Wight, Isle of.

North I
Durham.
Northumberland.

North II
Cumberland.
Westmorland.
Yorkshire, E. Riding.
Yorkshire, N. Riding.

North III
Yorkshire, W. Riding.
York, C.B.

North IV
Cheshire.
Lancashire.

Midland I.
Gloucestershire.
Herefordshire.
Shropshire.
Staffordshire.
Warwickshire.
Worcestershire.

Midland II
Derbyshire.
Leicestershire.
Northamptonshire.
Nottinghamshire.
Peterborough, Soke of.

East
Cambridgeshire.
Ely, Isle of
Huntingdonshire.
Lincolnshire—
Pa ts of Holland.
Parts of Kesteven.
Parts of Lindsey.
Norfolk.
Rutland.
Suffolk, East.
Suffolk, West.

South West
Cornwall.
Devon.
Dorset.
Somerset.
Wiltshire.

Wales I
Brecknockshire.
Carmarthenshire.
Glamorganshire.
Monmouthshire.

Wales II
Anglesey.
Caernarvonshire.
Cardiganshire.
Denbighshire.
Flintshire.
Merionethshire.
Montgomeryshire.
Pembrokeshire.
Radnorshire.

4. General

See also explanatory notes to the Parts I, Tables volumes.

CORRIGENDA

Statistical Review, 1946–47, Text, Medical

Page 85. Table XLIX, Ages 5–14, Midland II, 1938–39, *for* 2 *read* 302.
Page 285. Table, line $\varkappa^2$, Double Poisson Distribution, *for* 2·14 *read* 21·4

STATISTICAL REVIEW, 1948–1949

INTRODUCTION

The year 1948 is notable for the coming into operation in July of the National Health Service Act, 1946, and also for a remarkable health record. An immediate relationship of cause and effect can hardly be claimed within so short a period as a single year. Attempts to compare the health statistics of 1948, particularly mortality statistics, immediately before and after the introduction of the new Health Service with a view, for example, to answering the question whether health has or has not suddenly improved are of little value. The impact of the new Health Service on health statistics is rather different. The increasing responsibility of the central government for provision in the field of medical treatment as well as prevention demands an increasing knowledge by the government departments concerned of the state of health or sickness of the people and the changing demands likely to be imposed on available resources for maintaining and restoring health.

Some of the preparations for meeting these expected demands for greater knowledge were referred to in the introduction to the Review for 1946–47 (Medical Text). They were aimed at supplementing information about diseases which cause death by information about diseases which simply cause sickness or require consultation between the patient and a doctor or require hospital treatment. Some preliminary results of the morbidity enquiries which had started before 1948 or were introduced in 1949 have been published, and fuller results are to be published in separate volumes of the Statistical Review for 1949.

Developments of interest in the field of health statistics in 1948 were not, however, confined to this country, and an account is given in Appendix "A" to this volume of the work which was being done in 1948 and 1949 towards establishing the new International Statistical Classification of Diseases, Injuries and Causes of Death and towards standardizing the methods of obtaining information about causes of death and of publishing health statistics so that the statistics of one country can be better compared with those of another. These developments culminated in the first regulations adopted by the World Health Organization, briefly described as The W.H.O. Nomenclature Regulations, 1948. This Appendix also includes an account of the arrangements made at the first two World Health Assemblies for providing an adequate organization within the World Health Organization to ensure that the statistics available within the separate member countries could be brought together for use in guiding the attack on sickness throughout the world and also to ensure the maximum possible co-operation between countries in developing their health statistics. The bringing together in the same international organization of responsibility for medical statistics and their uses and responsibility for the international aspects of clinical medicine and public health should be to the mutual benefit of all aspects of medical work.

The value of medical statistics in emphasising where further research or administrative action is needed and in serving as a tool in studies of the causation of disease and of the effectiveness of clinical treatment is also being recognised more and more by the medical profession in this country.

As mentioned in the Introduction to the Review for 1946–47, the Registrar General, after consultation with the Presidents of the Royal Colleges and others appointed a standing Advisory Committee on Medical Nomenclature and Statistics in November, 1948. The advice and support of this Committee has increased the value of the classification of diseases used in national statistics and the effectiveness of much of the work of the General Register Office and other departments in the field of medical statistics. The Registrar General greatly appreciates the willingness of those members of the medical profession and others serving on the Committee to give so much of their time and thought to the ways in which medical statistics can better serve the needs of medicine and the public health.

An account of the first two years' work of this Committee and a list of its members is included as Appendix " B " to this volume. Meeting under the chairmanship of Sir Ernest Rock Carling, the Committee gave advice, amongst other things, on the preparation of a Code of Operational Procedures, the proposed international definitions of live birth and stillbirth, on the improvement of certification of causes of death, and on the various morbidity enquiries which were being undertaken by the General Register Office.

Except in Appendix " C ", which gives an account of the effects of changes in classification arising from the introduction of the new International Classification, the results of these activities do not show themselves in the present volume, which is concerned with mortality, causes of death and notified cases of certain diseases in the two years 1948 and 1949. Apart from Appendix " C " and one section on pages 197 to 202, the classification used in this volume is the Manual of the International List of Causes of Death (5th Revision) 1938. In 1949, however, all death certificates were coded according to both the 5th Revision Classification and the new 6th Revision Classification to provide a basis for comparing figures classified according to the old list with those classified according to the new list to be used from 1950. The results of this dual classification are discussed in Appendix " C ", which includes a table of causes of death according to the new list by sex and age, comparable with Table 21 in Part I of this Review.

The number of deaths in 1948 was 9·2 per cent. lower than in 1947 and the crude mortality rate of 11 per thousand population was the lowest on record. Mortality in 1949, though higher than in 1948, was still below that of 1947. It is shown on page 13 that the first two quarters of the year made an exceptional contribution to the low rate for the whole of 1948. For purposes of comparing mortality in different parts of the country, making allowance for differences in the local age distribution of the population, area comparability factors were re-introduced in 1949 and their use is discussed on page 15.

The comparison of " total " and " civilian " death rates on page 7 shows that the effect of excluding non-civilians from the rates for all ages in 1948 and 1949 was very small, but the effect of excluding non-civilians on the male death rates for ages 15–24 cannot be neglected and is discussed on page 58. In spite of the exclusion of non-civilians, however, an unique event occurred in 1948 when female mortality actually exceeded male mortality in the age group 20–24 (page 59).

Although there has been an actual decline in the mortality caused by violence, its relatively increasing importance as a cause of death among children is noted on page 49 and page 51. A general review of the changing pattern of mortality in childhood is given on pages 52 to 57, where it is shown that although tuberculosis mortality has fallen substantially, it now accounts for half the deaths from the infective and parasitic groups of diseases among children and that more deaths of children are now attributed to cancer than to cardio-vascular diseases. Another point of interest in the mortality of children aged 5–14 is that the rural areas appear to be losing their advantage over the urban areas (page 51). The increasing importance of violence as a cause of death appears again in the age group 20–24 where, in 1949, it displaced tuberculosis as the leading cause of death among males (page 59). At ages over 50 mortality was very low in 1948 but higher in 1949 (page 60) ; on pages 61 to 64 the major changes in the causes of death at these ages are discussed and for each age group attention is again drawn to the increasing importance of cancer and coronary disease as recorded causes of death and the possible influence of changing fashions in certification on the latter. A striking indication of the greater longevity of women compared with men is the fact that almost five times as many women as men survived to die as centenarians.

Throughout the discussion of infant mortality and stillbirths (pages 17 to 42) differences between mortality figures for the first month and, even more, for the first week of life and mortality figures for later months, and similarities between mortality figures for the first month of life and stillbirth figures, are apparent. Infant mortality and stillbirths are discussed in relation to sex, legitimacy, area of residence and causes of infant deaths on pages 19 to 28 ; in relation to secular trends on pages 28 to 38 ; and in relation to social class as determined by the parent's occupation on pages 38 to 42. Some of the points which are commented on are the greater regional variations for postnatal (i.e., second to twelfth months) mortality rates than for neonatal mortality or stillbirth rates (page 34), the consistent improvement in mortality during the first week of life since the late 1930's contrasting with a static rate at this age for many years previously (page 30), and the failure of the worst regions for infant mortality to improve their relative position at least so far as postnatal mortality is concerned (page 34). The figures of infant mortality and stillbirths in relation to social class are the first on this subject for England and Wales since 1939, and show that the disparity between the different social classes has not been reduced and, so far as postnatal mortality is concerned, has in fact tended to increase.

The influence of fluctuations in fertility as they affect the decline in maternal mortality is referred to on page 213 where it is also shown that only one-seventh of maternal deaths were due to sepsis in 1948–49 compared with almost half of these deaths in 1928–30. The extent to which different age groups have benefited from the recent improvement in maternal mortality is considered on page 220, where it is shown, for example, that at ages over 35 there was less improvement than at younger ages, especially in mortality from toxæmia. Maternal mortality continues to be higher in Wales and lower in Greater London and the Midland II region than in the rest of the country (page 228).

Table XXXVII (page 67) sets out the important diseases from which mortality was 5 per cent. or more higher in 1949 than in 1938. The list is headed by poliomyelitis (but it should be borne in mind that 1949 was an epidemic year) and diseases of the coronary arteries take second place in each sex.

Among the common infectious diseases of childhood the relative importance of whooping cough has been increasing because reductions in mortality among other diseases have been so dramatic ; the very substantial decline in mortality from whooping cough in 1949 is therefore specially welcome (page 76). The numbers of notified cases of diphtheria and of deaths continued their spectacular decline, by 36 per cent. in 1948 and some 45 per cent. in 1949 (page 78) ; Birkenhead, Liverpool and Plymouth, although sharing in the general decline, have appeared fairly consistently in recent years among the towns with comparatively high rates of notified cases. The analysis of diphtheria immunization returns in Appendix " D " is in less detail than in previous years because of the reorganization of local health services in 1948, but it shows that, in the country as a whole, the incidence of notified attacks of diphtheria was more than four times as high in unimmunized as in immunized children, and that the chance of an attack proving fatal was more than five times as high.

Tetanus does not rank as one of the common infections of childhood but, in relation to the possibility of active immunization of civilians against the disease, a special analysis of the figures of tetanus mortality in the ten years 1940 to 1949 by age and type of area of residence was undertaken. A summary of the figures is given in Table LVI (page 85).

The epidemic of poliomyelitis in 1949 suggested that the unprecedentally high prevalence in 1947 had inaugurated a new phase in this country's experience of the disease. The number of deaths from poliomyelitis and, to a lesser extent, of notifications returned to relatively normal levels in 1948, but increased again to levels comparable with those of 1947 during 1949. Differences between the epidemics of 1947 and 1949 in their timing and in the ages affected are referred to on pages 121 and 122, and the incidence of the epidemic in different areas of the country is shown in Table LXXXI (page 125).

The exceptionally low mortality from influenza in 1948 is referred to on page 115. The beneficial influence of the absence of influenza is evident in the mortality figures for many other causes of death, not only the respiratory causes, and is referred to in several places throughout the volume.

Following the increase in the number of deaths from tuberculosis in 1947 there was a substantial decrease in deaths from this cause in each of the years 1948 and 1949. In the Review for 1946–47 attention was drawn to the tendency for male mortality from respiratory tuberculosis at ages over 55 to increase, but increases in 1948 and 1949 were restricted to men over 65 and male mortality at ages over 65 is now considerably higher than before the war (page 88). Among women mortality from respiratory tuberculosis also increased at ages over 55 in 1949 after a fall in 1948. The decline in mortality from other forms of tuberculosis has been very substantial in the lower ages (page 90). It is apparent that the pattern of tuberculosis is not necessarily the same for mortality and for notifications either in age distribution or in the way different parts of the country are affected (page 100).

The importance of cancer among the causes of death is emphasized by the fact that between ages 45 and 65 it is responsible for about a quarter of the deaths of men and more than a third of the deaths of women (page 135). Changes in cancer mortality in different age groups are summarized on page 148, where it is shown, for example, that for women aged between 35 and 75 cancer mortality is declining and for men in the age group 35–44 the increasing tendency in cancer mortality was reversed in 1948 and 1949. Changes in mortality rates for cancer at different sites are summarized on page 151 and the significance of these changes, particularly in relation to improving diagnosis and death certification, is discussed. In view of the importance of the increase in mortality attributed to cancer of the lung, the evidence in favour of its increase being due to a real change is discussed in greater detail on pages 157 to 159. The influence of marriage and fertility on cancer of the female genital organs and breast is considered on page 164 to 167. Much attention has been focussed on geographical variation in cancer mortality since the publication by the General Register Office of " Regional and Local Differences in Cancer Death Rates " *; the tables which have been published in previous Reviews showing regional variation and the effect of urbanization in a general sense are continued in this volume for 1948 and 1949 (pages 162 to 164).

Difficulties in assessing the significance of fluctuations in mortality from intracranial lesions of vascular origin and of convulsions in children are considered on page 186 and of the so-called degenerative cardiac conditions on page 193, where the increasing importance of coronary diseases relative to myocardial degeneration as certified causes of death is again referred to.

Because of the interest attached to the differences in mortality from diseases of the circulatory system and vascular lesions of the central nervous system in different social classes, a preliminary assessment of the position in 1949 is included on pages 197 to 202. It appears that the increase from Social Class I to Social Class V in mortality from cerebral vascular lesions, myocardial degeneration (other than coronary disease) and general arterio-sclerosis have changed little since 1930–32, but the gradient of mortality from coronary disease, which is in the opposite direction, appears to have been reduced. The

* Studies on Medical and Population Subjects No. 1. H.M.S.O. price 1s. net. (by post 1s. 2d.)

figures on page 199 show also the contrasts in the proportions of deaths assigned to these causes between certain broad occupational groups within the social classes.

The figures relating to other non-violent causes of death are considered on pages 168 to 186 and pages 202 to 213. These include rheumatic fever, for which the post-war downward trend in mortality continued, and other rheumatic diseases ; diabetes, for which there was a slight increase in 1949 ; pernicious anaemia, which showed a very substantial improvement in 1948 ; the leukaemias, for which the certified mortality continued its steady rise since the disease was first distinguished in the statistics in 1911 ; alcoholism and cirrhosis of the liver, which appear to be more closely related than statements on death certificates would suggest ; pneumonia, where it is shown that the improvement in mortality is greater in the middle age groups than in young and old people ; and gastric and duodenal ulcers, for which the overall trends conceal a declining mortality at younger ages and an increasing mortality at older ages in each sex.

The trends of mortality from suicide and the way they affected different age groups in each sex are considered on page 228 and it is shown that, particularly at the older ages, rates are tending to increase again towards their pre-war evels. Deaths from motor vehicle accidents also started to rise again in 1949, after recording a low figure in 1948 ; while the particularly vulnerable age group 5–9 years did not share in this rise, the mortality figures by ages emphasize the need for training and supervision in this age group (page 236). In a review of fatal accidents in houses and other places of residence over the ten years 1940 to 1949 (pages 250 to 255) it is shown that, while the estimates of such deaths in the years 1948 and 1949 were lower than in any other year of the decennium, they remained above the numbers of fatal accidents on the roads and, while deaths from burns and scalds have declined remarkably, and deaths from falls substantially during the ten years, those from poisoning increased.

GENERAL MORTALITY COMPARISONS

Numbers of Deaths

In 1948 there was a total of 469,898 deaths registered in England and Wales, 242,899 being of males and 226,999 of females. These included 1,253 deaths of non-civilians, 1,225 males and 28 females. In 1949 there were 510,736 deaths, 260,686 being of males and 250,050 being of females. Deaths of non-civilians in this year were 763, of which 744 were males and 19 were females. The number of deaths in 1948 was 9·2 per cent. lower than in the previous year; in 1949, the total of deaths registered increased and was 8·7 per cent. above that of 1948, the increase in deaths of males being smaller than that of females (7·3 and 10·2 per cent. respectively). Deaths of non-civilians registered in each year are excluded from all tables in the Statistical Review, Part I, except Tables 3 and 4 (total deaths registered), and Tables 20, 21A, 25C and Appendix 20 which show details of sex, age and cause. In the present volume deaths of non-civilians are included or excluded as indicated at each table.

Death Rates

Crude Death Rates represent the total numbers of deaths from all causes registered during the year as belonging to the area in question, after correction for transfers to the place of residence of the deceased, per thousand or per million of the corresponding estimated population at the middle of the year. Use of the mid-year population involves the assumption that the population resident in the area was either stationary or changing at a uniform rate throughout the year. This assumption was hardly justifiable during and just after the war, but from 1947 onwards, when the effects of demobilisation became negligible, the mid-year populations have been used.

No estimate could be made of non-civilians at risk to die within separate regions and areas, and consequently the crude death rates in Table 17 (Part I) are civilian rates.

For England and Wales as a whole total death rates have been published in the Registrar General's Quarterly Returns, the numerators of the rates being the total deaths registered in the country, and the denominators being the whole population at the mid-year inclusive of non-civilians and merchant seamen both at home and abroad. The total death rate is lower than the civilian rate partly because the total deaths used as the numerator do not include deaths abroad of non-civilians and merchant seamen and partly because non-civilians, included in the total rate, are primarily young adults free from chronic diseases and with a death rate lower than average. The effect of this was, of course, considerable during and immediately after the war, but as the table of civilian and "total" death rates shows, the gap between the two rates has nearly closed.

Total and Civilian Death Rates

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Civilian death rate	14·4	13·5	12·3	13·0	12·7	12·6	12·1	12·3	11·0	11·8
Total death rate	13·9	12·8	11·5	11·9	11·6	11·4	11·5	12·0	10·8	11·7
Civilian D.R. as per cent. of Total D.R. . .	103	106	107	109	110	111	105	103	101	101

Civilian Death Rates are used in 1948 and 1949 for all purposes of local statistics, and represent the numbers of deaths registered during the year as belonging to the area in question, with deduction of those of non-civilians in each year, and corrected for transfers to place of residence, per thousand or per million of the corresponding estimated civilian population for the year as given in Table 17 (Part I).

Specific Death Rates relate either to mortality assigned to selected causes, or else to mortality amongst groups of persons of selected sex, age or civil condition. Rates of the latter type are, with certain exceptions, usually obtained by dividing the number of deaths registered in the year as being those of persons in the selected group by the estimated number of such persons alive at the mid-year. Exceptions to the use of estimated populations as denominators are the various rates of infant mortality, which are based on the appropriate numbers of live births, and certain death rates connected with child-bearing which are based upon the appropriate numbers of live and still births.

Standardised Mortality Comparisons

Comparative Mortality Index.—This index has replaced the standardised death rate which was used until 1939 for the purposes of measuring the trend of mortality from all causes, or from a particular cause, over a period of time. The methods of calculation and a discussion of its advantages over the standardised death rate may be found on pages 6–11 of the Review for 1940–45. Briefly, it represents the ratio between adjusted death rates of the year in question and of a base year (at present the year 1938), each calculated by weighting the death rates at the various sex-age groups by the mean of the corresponding proportions of the population living in the two years. If the death rate experienced by an age group in the year to which the index relates is denoted by m, and the corresponding rate in 1938 by m′, and if r and r′ are the fractions of the populations of all ages falling within that age group then

$$\text{C.M.I.} = \Sigma m\,(r + r') \;/\; \Sigma m'\,(r + r')$$

where Σ denotes summation over all the age groups.

The C.M.I's. for all causes of death are shown in Table 3 (Part I) for all persons and each sex separately from 1841 to 1949. For separate causes of death, C.M.I's. are given in Table 8 for each sex in each of the last ten years ; and for certain important causes Table 9 gives the indices for years or periods of years extending as far back as the records allow. In these tables, the Index for the year 1938 is taken as unity.

The adjusted ratios of male to female mortality also shown in Table 3 (Part I) are derived by the same formula as the C.M.I's., but interpreting m′ and r′ as referring to females and m and r as referring to males, each in the year to which the ratio applies.

The mortality ratios for each year or period of years, shown in Table 5 (Part I), are the ratios between the C.M.I. of the period specified and that of the period immediately preceding it. Thus the cumulative product of the mortality ratios proceeding forwards from 1938 produces the successive C.M.I's. of the years 1939 to 1949 ; and the cumulative product of the reciprocals of the mortality ratios proceeding backwards from 1938 likewise produces the successive C.M.I's. for years prior to 1938.

The **life-table death rate** is another measure derived from the death rates at separate ages which is not influenced by the age distribution of the population in the year of measurement ; it is the reciprocal of the expectation of life at birth.

The equivalent average death rate is the arithmetic mean of the rates at quinquennial groups of ages up to some convenient limit such as 65, this being equivalent to calculating a standardised death rate at ages under 65 based upon a population uniformly distributed over the 13 age groups.

The uses and disadvantages of the life-table death rate and the equivalent average death rate in mortality comparisons were discussed on page 12 of the 1940–45 Review.

Trend of various indices for England and Wales since 1901.—The changes in the age constitution of the population during the period 1901 to 1949 are shown in Table I :—

Table I.—Population of Persons in England and Wales by Ages, per 10,000 at all ages, 1901, 1911, 1921, 1931, 1939, 1948 and 1949.

Age (l.b.d.)	1901 Standard	1911 Census	1921 Census	1931 Census	1939 Mid-year	1948 Mid-year*	1949 Mid-year*
0–	1,143	1,069	877	749	690	**840**	**845**
5–	2,099	1,995	1,895	1,635	1,415	**1,304**	**1,324**
15–	1,958	1,805	1,756	1,734	1,592	**1,376**	**1,352**
25–	1,616	1,651	1,520	1,605	1,671	**1,511**	**1,488**
35–	1,228	1,344	1,411	1,368	1,465	**1,562**	**1,557**
45–	892	978	1,167	1,235	1,244	**1,308**	**1,325**
55–	597	637	769	932	1,026	**1,032**	**1,032**
65–	331	377	434	536	643	**727**	**729**
75–	121	126	151	182	225	**295**	**301**
85 and over..	15	18	20	24	29	**45**	**47**
All Ages ..	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**	**10,000**

* Total population including members of the armed forces and merchant seamen at home and abroad.

The proportion of children under 15 years of age declined from 32·4 per cent. in 1901 to 21·1 per cent. in 1939 but rose a little to 21·4 and 21·7 per cent. in 1948 and 1949. This rise is due to the increased number of births that occurred after the war. The proportion of people aged 65 and over has been increasing over the whole period from 4·7 per cent. in 1901 to 9·0 per cent. in 1939 and 10·8 per cent. in 1949. The annual rate of increase averaged 0·19 per cent. between 1931 and 1939 and 0·18 per cent. between 1939 and 1949.

These changes in the age composition of the population have been reflected in the divergent trends of the crude and adjusted death rates. From 1911 to 1949 the crude rate has fallen by less than 20 per cent. while the C.M.I. has, for the same period, fallen by over 40 per cent.

Table II shows for each sex, (*a*) the crude death rate for all ages, (*b*) the life-table death rate for all ages, (*c*) the equivalent average death rate at ages under 65, and (*d*) the comparative mortality index for all ages. The trends for each are also given, showing the percentage change from 1911. Figures for 1940 onwards are based on civilian deaths and populations only, and rates are accordingly inflated during the war period 1940–46.

The crude death rate fell by approximately the same percentage for each sex from 1901 to 1911 and from 1911 to 1921. Since 1921, however, there has been little further decline in the rate and, although 1948 registered the lowest rate on record, the crude death rates for each sex in 1949 were only 2 per cent. lower than in 1921. Females have a consistently lower crude death rate than males.

Table II.—Crude death rates and standardised mortality comparisons for each sex, 1901 to 1949.

Year	Crude death rate All Ages		Life-Table* death rate All Ages		Equivalent average rate Under 65		Comparative Mortality Index All Ages	
	M	F	M	F	M	F	M	F
	Rates per 1,000 living						1938 taken as unity	
1901	18·1	15·8	—	—	16·2	13·2	1·764	1·862
1911	15·6	13·7	19·4	18·1	13·6	11·0	1·496	1·568
1921	12·9	11·3	18·0	16·8	10·5	8·5	1·202	1·266
1931	13·0	11·6	17·0	15·9	9·3	7·2	1·127	1·183
1936	12·9	11·4	—	—	8·7	6·4	1·061	1·087
1937	13·2	11·7	16·5	15·5	8·8	6·5	1·073	1·100
1938	12·5	10·8	16·3	15·2	8·2	5·9	1·000	1·000
1939	13·0	11·3	16·2	15·1	8·1	5·8	1·016	1·028
1940	16·1	12·9	17·1	15·7	10·0	6·7	1·187	1·156
1941	15·7	11·8	17·1	15·5	9·5	6·2	1·096	1·043
1942	14·4	10·7	16·2	14·8	8·2	5·4	0·967	0·916
1943	15·3	11·3	16·2	14·8	8·4	5·5	0·978	0·944
1944	15·3	10·8	16·1	14·6	8·2	5·2	0·952	0·894
1945	15·0	10·8	16·0	14·5	7·8	5·0	0·920	0·875
1946	13·4	10·9	15·5	14·4	7·2	4·8	0·889	0·875
1947	13·5	11·3	15·5	14·4	7·2	4·8	0·921	0·892
1948	11·9	10·1	15·1	14·1	6·5	4·3	0·815	0·789
1949	12·6	11·1	15·1	14·2	6·6	4·3	0·863	0·851
	Per cent. of corresponding rate or index in 1911							
1901	116	115	—	—	119	120	118	119
1911	100	100	100	100	100	100	100	100
1921	83	82	93	93	77	77	80	81
1931	83	85	88	88	68	65	75	75
1936	83	83	—	—	64	58	71	69
1937	85	85	85	86	65	59	72	70
1938	80	79	84	84	60	54	67	64
1939	83	82	84	83	60	53	68	66
1940	103	94	88	87	74	61	79	74
1941	101	86	88	86	70	56	73	67
1942	92	78	84	82	60	49	65	58
1943	98	82	84	82	62	50	65	60
1944	98	79	83	81	60	47	64	57
1945	96	79	82	80	57	45	61	56
1946	86	80	80	80	53	44	59	56
1947	87	82	80	80	53	44	62	57
1948	76	74	78	78	48	39	54	50
1949	81	81	78	78	49	39	58	54

* From 1937, estimated from abridged life-table based on annual rates (for civilians from 1940 onwards).

Table III.—Abridged Life Tables, 1948 and 1949.—England and Wales.

(Civilian Populations)

Age x	Males		Females	
	l_x	$\overset{o}{e}_x$	l_x	$\overset{o}{e}_x$
	1948			
0	10,000	66·39	10,000	71·15
1	9,619	68·01	9,705	72·30
2	9,592	67·20	9,679	71·50
3	9,573	66·33	9,665	70·60
4	9,562	65·41	9,654	69·68
5	9,550	64·49	9,645	68·75
10	9,508	59·76	9,616	63·94
15	9,478	54·94	9,590	59·11
20	9,416	50·29	9,536	54·43
25	9,344	45·66	9,462	49·84
30	9,263	41·04	9,379	45·26
35	9,170	36·43	9,295	40·64
40	9,055	31·86	9,199	36·04
45	8,885	27·42	9,069	31·52
50	8,597	23·25	8,878	27·15
55	8,170	19·34	8,594	22·96
60	7,511	15·82	8,195	18·96
65	6,558	12·75	7,595	15·26
70	5,366	10·03	6,722	11·91
75	3,948	7·73	5,445	9·12
80	2,452	5·92	3,817	6·95
85	1,164	4·71	2,150	5·39
	1949			
0	10,000	66·01	10,000	70·63
1	9,635	67·50	9,720	71·66
2	9,609	66·68	9,697	70·83
3	9,596	65·77	9,683	69·93
4	9,582	64·87	9,673	69·00
5	9,572	63·94	9,665	68·06
10	9,534	59·18	9,637	63·25
15	9,504	54·36	9,613	58·40
20	9,444	49·69	9,567	53·67
25	9,370	45·06	9,499	49·04
30	9,292	40·42	9,425	44·40
35	9,205	35·78	9,342	39·77
40	9,092	31·19	9,243	35·17
45	8,922	26·74	9,112	30·64
50	8,633	22·55	8,917	26·26
55	8,190	18·63	8,630	22·05
60	7,504	15·11	8,210	18·05
65	6,504	12·05	7,579	14·34
70	5,242	9·35	6,637	11·02
75	3,744	7·09	5,244	8·29
80	3,207	5·28	3,514	6·14
85 ..	947	3·98	1,812	4·55

These abridged life tables are constructed from the estimated civilian populations in 1948 and 1949 and the civilian deaths registered in those years.

The column headed l_x shows the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the death probabilities indicated by the 1948 and 1949 death records. Column $\overset{o}{e}_x$ is the " expectation of life ", that is the average future lifetime which would be lived by persons aged exactly x, if likewise subject to these death probabilities.

The crude death rates have not decreased much since 1921 owing to the increasing proportion of the population aged 65 years and over. This is shown by the trend of the equivalent average rates which exclude those aged 65 and over. These rates have fallen continuously over the whole period, and the decrease from 1921 to 1949, when the crude death rate fell by 2 per cent., was 37 per cent. for males and 50 per cent. for females. The trend of the life-table death rate (one thousand divided by the expectation of life at birth) which includes ages over 65 but does not reflect the effect of increasing proportions of the population at that age, lies mid-way between the crude death rate and equivalent average rate, and shows a continuous improvement in each sex of about 5 per cent. in each decade.

The C.M.I. has fallen by nearly 50 per cent. for each sex over the period 1911 to 1948, and like the crude death rate increased from 1948 to 1949, by about 6 per cent. for males and 8 per cent. for females.

Expectation of Life

The Expectation of Life is the *average* number of years of life that will be lived by a group of people of given age subjected to a given mortality experience, usually the mortality experience of a selected year or period of years. The basis of the calculation of Expectation of Life, is the Life Table. Although no English Life Table has been published since 1931, abridged Life Tables for 1946 and 1947 were published in the Review for those years (Appendix B, page 312), and similar tables for 1948 and 1949 are given here in Table III.

The Expectation of Life at birth and at age 1, as given in each of the English Life Tables Nos. 1 to 10 and in abridged life tables calculated for each year 1940 to 1949, are shown in Table IV.

Table IV.—Expectation of Life at Birth and at Age 1 Year, 1841–1932 and 1940 to 1949. England and Wales.

From English Life Table	Year	Expectation of Life at			
		Birth		Age 1 year	
		Male	Female	Male	Female
No. 1	1841	40	42	47	48
2	1838–44	40	42	47	47
3	1838–54	40	42	47	47
4	1871–80	41	45	48	50
5	1881–90	44	47	51	53
6	1891–1900	44	48	52	55
7	1901–10	49	52	56	58
8	1910–12	52	55	58	60
9	1920–22	56	60	60	63
10	1930–32	59	63	62	65
From annual Abridged Life Tables	1940	58	64	61	66
	1941	59	65	62	67
	1942	62	67	64	70
	1943	62	67	64	69
	1944	62	68	64	70
	1945	63	69	65	71
	1946	65	69	67	71
	1947	64	69	67	71
	1948	66	71	68	72
	1949	66	71	68	72

Quarterly Deaths and Death Rates

Numbers of deaths registered in England and Wales (including non-civilians) and death rates (excluding non-civilians from September, 1939) in each quarter are given in Table 4 (Part I) by decennial periods from 1841 and by single years from 1937. Table V gives quarterly rates for quinquennial periods from 1851 and by single years from 1931, the rate in each quarter being also shown as a percentage of the annual rate.

Table V.—Quarterly death rates in each quinquennium 1851–1945, and in each year 1931 to 1949, with ratio to yearly rate taken as 100.

Year	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	September	December	March	June	September	December
1851–55 ..	25·3	22·5	21·0	21·9	111	99	93	96
1856–60 ..	24·1	21·6	19·6	21·9	111	99	90	100
1861–65 ..	25·7	22·0	20·4	22·3	114	97	90	99
1866–70 ..	24·7	21·6	21·5	22·0	110	96	96	98
1871–75 ..	24·3	21·1	20·4	22·1	110	96	93	100
1876–80 ..	23·2	20·7	18·8	20·6	112	100	90	99
1881–85 ..	21·4	19·3	17·6	19·4	110	99	91	100
1886–90 ..	21·7	18·0	17·0	18·9	115	95	90	100
1891–95 ..	21·8	18·5	16·4	18·1	117	99	88	97
1896–1900	19·5	16·6	17·5	17·2	110	94	99	97
1901–05 ..	17·9	15·2	14·9	16·1	112	95	93	101
1906–10 ..	17·4	14·1	12·6	14·7	118	96	86	100
1911–15 ..	16·9	13·7	12·7	14·0	118	96	89	98
1916–20 ..	17·5	13·5	10·9	15·8	122	94	76	110
1921–25 ..	15·1	11·9	9·6	12·0	124	98	79	98
1926–30 ..	15·9	11·5	9·4	11·6	131	95	78	96
1931–35 ..	15·4	11·5	9·6	11·7	128	96	80	98
1936–40 ..	16·1	11·7	10·0	12·3	129	94	80	98
1941–45 ..	16·1	12·3	10·2	12·8	125	96	80	100
1931 ..	16·5	11·5	9·6	11·7	134	93	78	95
1932 ..	15·4	11·6	9·7	11·5	128	97	81	96
1933 ..	17·1	10·8	9·4	12·0	139	88	76	98
1934 ..	14·6	11·8	9·6	11·2	124	100	81	95
1935 ..	13·2	12·0	9·8	12·0	113	103	84	103
1936 ..	15·1	11·8	9·7	12·0	125	98	80	99
1937 ..	16·2	11·6	9·7	12·3	131	94	78	99
1938 ..	13·6	11·6	9·9	11·5	117	100	85	99
1939 ..	15·1	11·7	9·9	11·8	125	97	82	98
1940 ..	20·6	11·9	10·8	14·1	143	83	75	98
1941 ..	18·4	14·2	10·1	11·5	136	105	75	85
1942 ..	15·8	12·0	9·8	11·6	128	98	80	94
1943 ..	14·5	11·7	10·1	15·7	112	90	78	121
1944 ..	15·3	12·0	11·0	12·7	120	94	87	100
1945 ..	16·5	11·5	10·0	12·6	131	91	79	100
1946 ..	15·4	11·2	9·7	11·9	128	93	81	99
1947 ..	17·6	11·3	9·2	11·4	143	92	75	93
1948 ..	12·4	10·3	9·4	11·7	113	94	85	106
1949 ..	15·2	11·2	9·3	11·8	129	95	79	100

The death rate of 12·4 in the March Quarter, 1948, was the lowest yet recorded during this period of the year and this favourable mortality experience was attributable to a combination of relatively mild weather and an unprecedentedly low incidence of influenza. The death rate of 10·3 during the

second quarter of the year was likewise the lowest on record for that quarter. After adjustment for sex and age changes in population the quarterly death rates in 1948 and 1949 were lower than the corresponding rates in 1938 by the percentages shown below.*

	March	June	September	December
1948	*23*	*25*	*20*	*14*
1949	*6*	*19*	*21*	*14*

Table VI.—Mortality of Males per cent. of that of Females at Various Ages from 1841-45 onwards.

Year	Adjusted Percentage Ratio of Male to Female Mortality	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75–	85 and over
1841–45	110	117	102	92	88	105	95	101	114	111	111	109	106
1846–50	109	116	103	95	91	104	94	99	113	112	111	109	107
1851–55	110	116	104	98	90	103	97	102	118	114	112	110	106
1856–60	110	115	99	96	90	102	96	103	118	115	111	108	107
1861–65	112	115	102	98	93	105	100	109	122	118	112	109	110
1866–70	113	115	107	100	94	106	105	113	124	120	115	109	111
1871–75	115	117	108	100	97	109	109	119	128	121	114	111	110
1876–80	116	118	107	97	96	108	109	119	129	122	114	112	111
1881–85	115	118	102	97	96	102	104	117	127	122	116	113	112
1886–90	116	119	100	97	98	106	107	117	129	122	117	112	114
1891–95	116	119	98	96	100	108	108	118	128	121	115	111	110
1896–1900	118	118	98	96	106	120	116	122	129	124	117	113	109
1901–05	119	119	97	95	107	119	118	121	130	128	119	115	110
1906–10	120	119	97	95	107	121	118	121	129	128	121	115	113
1911–15	123	120	100	95	111	122	124	126	132	133	124	118	115
1916–20	128	121	100	92	114	122	124	131	135	137	132	121	111
1921–25	124	124	104	100	100	113	114	130	132	133	127	119	110
1926–30	127	125	110	105	106	108	112	134	140	136	130	121	107
1931–35	128	126	110	100	109	114	106	126	142	139	132	123	113
1936–40	134	127	115	113	115	120	115	129	147	152	136	130	113
1941–45	141	126	130	123	128	207	169	147	153	165	143	130	109
1926	126	124	109	100	104	107	112	133	135	134	129	123	111
1927	126	125	109	107	104	110	112	135	137	134	129	120	108
1928	128	126	109	113	108	103	112	130	138	136	130	123	110
1929	126	122	113	100	108	110	111	139	143	134	126	117	103
1930	129	128	110	104	109	112	111	133	144	139	133	121	103
1931	127	128	115	100	108	114	106	129	140	135	132	121	111
1932	127	125	116	108	114	114	110	123	135	137	134	123	110
1933	126	126	110	107	113	114	109	124	141	137	129	122	110
1934	128	124	104	100	109	115	107	124	142	142	132	124	111
1935	130	126	111	100	105	112	107	125	146	143	134	126	112
1936	131	128	117	118	105	112	111	126	142	147	133	127	112
1937	131	127	118	109	117	108	111	128	146	149	133	125	108
1938	134	129	106	118	118	122	116	129	148	150	137	130	112
1939	134	126	131	110	119	113	108	126	147	155	137	131	112
1940	138	129	118	113	119	168	139	141	155	160	136	130	113
1941	141	125	121	121	129	198	163	150	152	163	140	133	107
1942	142	127	128	127	123	197	160	145	150	162	145	133	111
1943	140	125	136	112	125	214	165	143	155	164	141	128	110
1944	143	126	134	129	126	203	175	153	155	169	146	130	112
1945	142	127	134	131	130	227	180	144	154	168	145	128	108
1946	138	130	129	128	130	149	113	127	154	168	144	127	113
1947	139	127	139	128	134	113	109	126	157	175	149	130	121
1948	141	128	142	116	116	99	106	129	155	177	153	129	115
1949	140	130	140	129	132	111	106	126	156	177	150	126	114

* Calculated by the formula

$$\text{Per cent. reduction} = 100\left\{1 - \frac{\text{Quarterly Rate 1948}}{\text{Quarterly Rate 1938}} \times \frac{\text{Annual Rate 1938}}{\text{Annual Rate 1948}} \times \frac{\text{C.M.I., 1948}}{}\right\}$$

Death Rates by Sex and Age

Table 5 (Part I) gives death rates for each sex at separate ages from 0–4 to 85 and over by quinquennial and decennial periods from 1841 and by single years from 1916, and this has formed the basis for the construction of the sex mortality ratios given in Table VI. The influence of military selection was most marked during the period 1940 to 1946 at ages 20–24, the mortality ratio attaining a maximum of 227 in 1945. In 1948, on the other hand, the sex ratio of this age group was even more exceptional in that the mortality of females exceeded that of males (see also page 59).

Comparison is made below between the ratios in 1931–35 and 1949, with the percentage differences between these periods.

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65 -	75–	85 & over
1931–35 ..	126	110	100	109	114	106	126	142	139	132	123	113
1949 ..	130	140	129	132	111	106	126	156	177	150	126	114
Percentage difference	+3	+27	+29	+21	−3	—	—	+10	+27	+14	+2	+1

Ignoring changes during intervening years the ratio increased most at ages 5–19 and 55–64. There was only a small increase in early childhood and in old age, no change at ages 25–44 and a reduction at ages 20–24.

Comparative Mortality in Different Parts of England and Wales

Table 17 (Part I) gives civilian populations, births, deaths, infant and neonatal deaths and stillbirths in geographical regions (standard regions in Appendix 17), counties, county boroughs, urban and rural aggregates and individual local areas.

Comparability factors, suspended during 1940–47, have been re-introduced and can be used to adjust the crude local death rates. When multiplied by the comparability factor, local rates can be compared with one another and with the rate for the country as a whole, allowance thus being made for local differences in the sex and age composition of the population. To facilitate such comparisons Table 17 also gives, for each region and local area, the ratio of its adjusted death rate to the national rate in the same year.

The use of comparability factors for the standardisation of local death rates was introduced in 1934. A description of methods of standardisation for area comparisons used previously is given in the Review for that year (Text, page 4), together with an account of the new method and the reasons for its introduction.

The sex and age distributions of local populations used to calculate the comparability factors for 1948 and 1949, the same factors being used in both years, were based on the population estimates at the end of 1947 derived from a special analysis of the National Register and from other sources of information.

These comparability factors shown in Table 17 were calculated on the basis of deaths from all causes and should only be used for the adjustment of death rates relating to all causes. For area comparisons of mortality from

particular causes a special series of comparability factors would have to be calculated based on mortality from these causes.

Comparison of the adjusted death rates of local areas with one another and with the national rate is valid only within the same year. If it is desired to make a standardised comparison between different years the local adjusted death rate, or preferably the ratio of the adjusted death rate to the national rate, requires further correction. Prior to the introduction in 1942 of the comparative mortality index for the standardisation of serial national death rates a " time comparability factor " was used for comparisons covering more than one year, this factor being the ratio of the standardised to the crude national death rate for the year in question, the standardisation being based on the 1901 population.

Standardised time comparisons of the ratios of local adjusted rates to the national rate can now be made, however, by multiplying these ratios by the C.M.I. for that year. It is necessary to make the assumption that changes in the sex and age composition of the local populations from year to year were proportionately the same as those in the national population.

The following table gives for England and Wales, Greater London and the three density aggregates in 1934, 1938, 1948 and 1949 :—

(*a*) crude death rates ;

(*b*) ratios of local adjusted to national rate ;

(*c*) those ratios multiplied by C.M.I's. to combine the area comparisons with comparisons of the overall national trend of mortality (after correction for population changes). The final ratios express the local adjusted mortality in relation to the national mortality in 1938.

	England and Wales	Greater London	County Boroughs*	Urban Districts*	Rural Districts*
(*a*) *Crude*					
1934	11·8	11·0	12·3	11·8	11·8
1938	11·6	10·2	12·3	11·8	11·7
1948	11·0	9·9	11·5	11·3	10·6
1949	11·8	10·6	12·4	12·2	11·6
(*b*) *Ratios of " local " adjusted to national rates in the same year.*					
1934	1·00	0·97	1·10	0·99	0·90
1938	1·00	0·91	1·12	1·01	0·90
1948	1·00	0·94	1·10	1·01	0·90
1949	1·00	0·93	1·10	1·01	0·91
(*c*) *Ratios adjusted to national mortality trend (1938 as base)*					
1934	1·07	1·04	1·18	1·06	0·96
1938	1·00	0·91	1·12	1·01	0·90
1948	0·80	0·75	0·88	0·81	0·72
1949	0·86	0·80	0·95	0·87	0·78

* Excluding Greater London

INFANT MORTALITY AND STILLBIRTHS

The measurement of Infant Mortality and Stillbirths

The simple **infant mortality rate** is the number of deaths at ages under one year per 1,000 live births registered during the same year. It is customary to express the deaths in any part of the first year of life, for example during the first four weeks, or from the fourth week to the end of the twelfth month, in terms of the same denominator. This definition of infant mortality, however, fails to take account of two problems. Firstly, there is a time lag in birth registration. Secondly, some infant deaths relate to births in the *previous* year.

These problems have been discussed in the Medical Texts for 1940–45 (pages 27–29) and 1946–47 (pages 15–17), where a method of allowing for both factors is described. The Review for 1940–45 shows also how to compute comparable infant mortality rates by sex, legitimacy, geographical regions and quarters of the year.

Since 1941, all infant mortality rates have been expressed as per 1,000 " related live birth occurrences ". This is more briefly described in the legends to tables as " related live births ". Rates for a number of earlier years have been recalculated to bring them into line with those of more recent years.

In the text and tables which follow, the rates employed, unless it is otherwise stated, conform to the following definitions :—

(*a*) *Infant Mortality Rate :* deaths among liveborn infants at ages under one year per thousand related live births

(*b*) *Neonatal Mortality Rate :* deaths among liveborn infants under four weeks old per thousand related live births

(*c*) *Postnatal Mortality Rate :* deaths among liveborn infants aged four weeks or over but under one year per thousand related live births

(*d*) *Stillbirth Rate :* stillbirths (at or over 28 weeks gestation) per thousand live and still births (*total* births).

Infant Mortality and Stillbirths in 1948 and 1949

The number of live births during 1948 and 1949 and the number of infant deaths during the same year are given for each sex in the last two columns of Table VII, which also shows the number of infant deaths and the number of live births which occurred in each of the four quarters of the year.

The number of stillbirths, occurring in 1948 and 1949 by sex, and the total number in each of the quarters, were as follows :—

		1948	*1949*
Total Stillbirths	M.	9,937	9,129
	F.	8,462	7,818
March quarter		5,015	4,431
June quarter		4,689	4,441
September quarter		4,418	4,134
December quarter		4,277	3,941

Tables IX and X show, *inter alia*, the detailed sex and age distribution of the infant mortality rates for each of the years 1948 and 1949, the rates for legitimate children being shown separately from those for illegitimate children.

Table VII.—Deaths at Ages under One year and Live Births by Sex, Legitimacy and Quarter of Year, 1939 to 1949.

		1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Number of deaths under 1 year registered		**31,190**	**33,892**	**34,550**	**32,258**	**33,431**	**33,455**	**31,959**	**33,541**	**36,849**	**26,766**	**23,882**
Legitimate	M	16,590	18,456	18,505	17,044	17,484	17,135	16,063	17,526	19,695	14,341	12,919
	F	12,269	13,317	13,622	12,553	12,938	12,727	11,791	12,677	14,375	10,514	9,286
Illegitimate	M	1,280	1,237	1,407	1,529	1,708	2,027	2,324	1,932	1,530	1,106	935
	F	1,051	882	1,016	1,132	1,301	1,566	1,781	1,406	1,249	805	742
March quarter		10,035	11,948	11,062	9,771	10,067	10,152	10,676	9,637	12,561	8,387	7,532
June quarter		7,897	7,713	8,787	7,868	8,106	7,983	7,227	7,657	9,195	6,357	5,758
September quarter		6,408	6,371	6,470	6,821	6,851	7,376	6,429	7,100	7,141	5,514	4,915
December quarter		6,850	7,860	8,231	7,798	8,407	7,944	7,627	9,147	7,952	6,508	5,677
Ages under 4 weeks		17,401	17,503	16,746	17,676	17,251	18,218	16,910	19,857	20,102	15,326	14,106
Ages 4 weeks-3 months		4,904	5,513	6,455	5,566	5,995	5,923	5,670	5,571	6,222	4,287	3,576
Ages 3–6 months		4,350	4,948	5,493	4,723	5,319	5,053	4,931	4,486	5,492	3,803	3,265
Ages 6-9 months		2,724	3,465	3,317	2,651	3,016	2,703	2,737	2,347	3,232	2,109	1,832
Ages 9–12 months		1,811	2,463	2,539	1,642	1,850	1,558	1,711	1,280	1,801	1,241	1,103
Number of live births registered		**619,352**	**607,029**	**587,228**	**654,039**	**683,212**	**744,843**	**685,273**	**819,894**	**886,820**	**776,970**	**731,172**
Number of live births occurring		**614,479**	**590,120**	**579,091**	**651,503**	**684,334**	**751,478**	**679,937**	**820,719**	**881,026**	**775,306**	**730,518**
Legitimate	M	302,584	289,395	281,130	316,889	330,062	358,893	317,321	394,618	429,689	377,799	357,000
	F	286,325	275,092	266,903	298,147	310,563	337,412	299,196	372,182	404,734	355,933	336,611
Illegitimate	M	13,022	13,220	15,924	18,871	22,736	28,745	32,751	27,681	23,901	21,313	19,064
	F	12,548	12,413	15,134	17,596	20,973	26,428	30,669	26,238	22,702	20,261	17,843
March quarter		152,729	153,659	143,003	156,318	171,853	183,840	171,045	179,869	239,627	202,823	186,228
June quarter		163,126	153,138	143,080	168,310	178,904	200,548	174,968	203,536	233,867	200,950	192,968
September quarter		155,458	149,143	148,305	166,840	171,415	183,713	169,481	214,224	214,308	191,724	182,220
December quarter		143,166	134,180	144,703	160,035	162,162	183,377	164,443	223,090	193,224	179,809	169,102
Infant mortality rates :—												
Per 1,000 registered births in same year		50·4	55·8	58·8	49·3	48·9	44·9	46·6	40·9	41·6	34·4	32·7
Per 1,000 related births		50·6	56·8	60·0	50·6	49·1	45·4	46·0	42·9	41·4	33·9	32·4

The salient rates for 1948 and 1949 were :—

	Stillbirth (*per* 1,000 *total births*	*Neonatal* (*per* 1,000 *live births*)	*Postnatal* (*per* 1,000 *live births*)
1948 ..	23·2	19·7	14·2
1949 ..	22·7	19·3	13·0

Differences between the sexes.—The mortality rate for male infants in 1948 was 38·1 as compared with 29·5 for female—a male excess of 29 per cent. From Table XII, which shows the male rate as a percentage of the female at different ages, it is evident that the excess of mortality among male infants was greatest in the first weeks of life, and between the fourth week and the third month. Among stillbirths it was much less marked, the 1948 rate of 24·3 for males exceeding the female rate of 22·0 by 9 per cent.

Differences according to legitimacy.—The illegitimate rates were considerably higher than those for legitimate children, as is evident in Table XII, where they are expressed as percentages of the corresponding legitimate rates at different ages and for a number of certified causes. For 1948 and 1949 illegitimate rates as percentages of the legitimate for stillbirths, neonatal deaths and postnatal deaths were as follows :—

	Stillbirth	*Neonatal*	*Postnatal*
1948 ..	139	143	128
1949 ..	132	159	117

The social and economic circumstances of unmarried mothers are not generally as favourable to survival of their children as those of married mothers ; the average age at maternity is less and there is a high proportion of first births.

Regional differences.—The 12 Geographical Regions into which England and Wales has been divided for the presentation of vital statistics are defined on p. viii.

Table VIII.—Distribution of Infant Mortality, 1948 and 1949.

Area	1948				1949			
	Deaths per 1,000 related births			Mortality per cent. of that in England and Wales	Deaths per 1,000 related births			Mortality per cent. of that in England and Wales
	Males	Females	Both Sexes	Both Sexes	Males	Females	Both Sexes	Both Sexes
England and Wales	**38·1**	**29·5**	**33·9**	**100**	**36·5**	**28·0**	**32·4**	**100**
South East	30·2	23·1	26·7	79	29·1	21·4	25·4	78
Greater London	30·0	23·6	26·9	79	28·9	21·2	25·2	78
Remainder of South East	30·4	22·6	26·6	78	29·2	21·8	25·6	79
North	45·2	36·0	40·7	120	43·3	34·5	39·0	120
North I	47·6	38·6	43·2	127	49·3	36·2	42·9	132
North II	43·9	34·3	39·3	116	43·2	33·4	38·4	119
North III	41·3	33·5	37·5	111	39·2	32·1	35·8	110
North IV	46·7	36·8	41·9	124	43·3	35·5	39·5	122
Midland	40·5	30·9	35·8	106	36·7	28·1	32·5	100
Midland I	39·5	29·2	34·5	102	36·3	28·6	32·6	101
Midland II	42·5	34·4	38·6	114	37·5	27·0	32·4	100
East	30·3	26·5	28·4	84	35·3	23·5	29·6	91
South West	33·7	22·4	28·2	83	31·8	24·8	28·4	88
Wales	44·4	33·9	39·3	116	44·1	34·3	39·3	121
Wales I	44·1	35·1	39·7	117	45·4	34·2	40·0	123
Wales II	45·2	30·4	38·0	112	40·4	34·6	37·6	116
County boroughs*	43·2	33·4	38·5	114	41·2	32·4	36·9	114
Other urban districts* ..	39·0	30·2	34·7	102	36·9	28·7	32·9	102
Rural districts*	35·4	27·7	31·7	94	35·0	25·9	30·6	94
Greater London Administrative County ..	33·9	26·3	30·2	89	30·3	22·6	26·6	82
Outer Ring	27·1	21·6	24·4	72	27·8	20·1	24·1	74

* Excluding Greater London.

Table IX.—Infant Mortality at various Ages, 1948. Rates per 1,000 Related Live Births.

		Total under 1 year	Under 30 mins.	30 mins. and under 1 day	Total under 1 day	Days						1 day and under 1 week	Weeks				Total under 4 weeks	4 weeks to 3 months	Months		
						1–	2–	3–	4–	5–	6–		0–	1–	2–	3–			3–	6–	9–12
England and Wales																					
All Infants	M.	**38·1**	**1·0**	**7·9**	**8·9**	**3·0**	**2·2**	**1·6**	**0·9**	**0·6**	**0·5**	**8·9**	**17·8**	**2·1**	**1·2**	**1·1**	**22·2**	**6·3**	**5·3**	**2·8**	**1·5**
	F.	**29·5**	**0·9**	**5·6**	**6·5**	**2·4**	**1·6**	**1·0**	**0·8**	**0·6**	**0·5**	**6·8**	**13·4**	**1·8**	**1·0**	**0·9**	**17·1**	**4·6**	**4·2**	**2·3**	**1·4**
	P.	**33·9**	**1·0**	**6·8**	**7·8**	**2·7**	**1·9**	**1·3**	**0·8**	**0·6**	**0·5**	**7·9**	**15·6**	**2·0**	**1·1**	**1·0**	**19·7**	**5·5**	**4·8**	**2·5**	**1·4**
Legitimate	M.	37·3	0·9	7·7	8·6	2·9	2·2	1·6	0·9	0·6	0·5	8·8	17·3	2·1	1·2	1·1	21·7	6·1	5·2	2·8	1·5
	F.	29·0	0·7	5·6	6·3	2·4	1·6	1·0	0·8	0·6	0·5	6·8	13·1	1·8	1·0	0·8	16·7	4·5	4·2	2·3	1·4
	P.	33·3	0·8	6·7	7·5	2·7	1·9	1·3	0·8	0·6	0·5	7·8	15·3	1·9	1·1	1·0	19·3	5·3	4·7	2·5	1·5
Illegitimate	M.	51·2	4·0	10·4	14·4	4·1	2·5	1·6	0·9	1·0	0·7	10·9	25·2	3·3	1·4	1·2	31·1	9·2	6·7	2·7	1·4
	F.	39·2	3·8	7·3	11·1	2·7	1·5	1·0	0·9	0·6	0·7	7·4	18·5	2·7	1·2	1·1	23·6	6·9	5·2	2·5	1·0
	P.	45·3	3·9	8·9	12·8	3·4	2·0	1·3	0·9	0·8	0·7	9·2	22·0	3·0	1·3	1·2	27·5	8·1	6·0	2·6	1·2
South East		26·7	1·0	5·9	6·9	2·5	1·7	1·0	0·7	0·5	0·4	6·8	13·7	1·6	0·8	0·6	16·8	3·9	3·2	1·8	1·0
Greater London		26·9	1·0	5·5	6·6	2·4	1·5	1·1	0·7	0·5	0·4	6·7	13·2	1·6	0·7	0·6	16·1	4·1	3·4	2·0	1·2
Remainder of South East		26·6	0·9	6·5	7·4	2·5	1·8	1·0	0·7	0·5	0·4	7·0	14·4	1·7	0·8	0·7	17·5	3·6	3·0	1·6	0·9
North		40·7	0·8	7·2	8·1	3·0	2·1	1·5	0·9	0·7	0·6	8·7	16·7	2·1	1·6	1·3	21·8	7·3	6·6	3·3	1·7
North I		43·2	0·6	6·8	7·4	3·2	2·3	1·4	0·7	0·7	0·7	9·0	16·4	2·1	1·7	1·1	21·3	8·7	8·0	3·2	2·0
North II		39·3	0·9	7·4	8·3	2·8	2·1	1·7	0·9	0·5	0·4	8·5	16·8	2·3	1·7	1·3	22·1	6·9	5·2	3·3	1·7
North III		37·5	0·7	6·6	7·3	2·7	1·9	1·3	0·7	0·7	0·6	7·8	15·1	2·3	1·7	1·3	20·4	6·6	5·9	3·2	1·4
North IV		41·9	1·0	7·7	8·7	3·0	2·1	1·5	1·1	0·7	0·6	9·0	17·8	2·0	1·5	1·4	22·6	7·2	6·8	3·4	1·8
Midland		35·8	1·2	7·2	8·4	2·9	2·0	1·4	0·8	0·7	0·5	8·3	16·7	2·1	1·1	1·1	21·0	5·5	4·9	2·7	1·6
Midland I		34·5	1·2	7·1	8·2	2·9	1·9	1·5	0·8	0·7	0·5	8·3	16·5	1·8	1·0	1·1	20·4	5·3	4·6	2·6	1·5
Midland II		38·6	1·3	7·5	8·8	2·8	2·1	1·3	0·9	0·7	0·5	8·3	17·1	2·8	1·2	1·1	22·3	6·0	5·5	3·0	1·8
East		28·4	0·8	6·3	7·1	2·6	1·8	0·9	0·8	0·5	0·4	7·0	14·1	1·6	0·8	0·8	17·3	4·2	3·5	2·1	1·3
South West		28·2	1·0	7·1	8·1	2·3	1·9	1·2	1·1	0·7	0·5	7·6	15·7	2·3	1·1	0·6	19·7	3·6	2·2	1·4	1·3
Wales		39·3	1·0	7·6	8·6	2·6	2·4	1·8	1·0	0·7	0·5	8·9	17·5	2·5	1·2	1·2	22·5	6·6	5·6	3·0	1·6
Wales I		39·7	1·0	7·6	8·6	2·5	2·4	1·8	1·0	0·6	0·3	8·6	17·3	2·4	1·2	1·4	22·3	7·0	5·9	3·1	1·5
Wales II		38·0	0·9	7·8	8·7	2·8	2·2	2·0	1·0	0·9	0·8	9·6	18·3	2·6	1·3	0·7	22·9	5·7	4·8	2·7	1·9
County boroughs*		38·5	0·9	7·0	7·9	2·9	1·9	1·3	0·8	0·6	0·5	7·9	15·8	2·1	1·3	1·2	20·5	6·8	6·2	3·2	1·7
Other urban districts*		34·7	1·0	7·3	8·3	2·8	2·1	1·4	0·9	0·6	0·5	8·3	16·6	2·1	1·2	1·0	20·8	5·3	4·7	2·5	1·4
Rural districts*		31·7	1·0	6·7	7·8	2·6	2·1	1·4	0·8	0·7	0·5	8·1	15·9	2·1	1·2	0·9	20·1	4·7	3·7	2·0	1·2

* Excluding Greater London.

Table X.—Infant Mortality at various Ages, 1949. Rates per 1,000 Related Live Births.

		Total under 1 year	Under 30 mins.	30 mins. and under 1 day	Total under 1 day	Days						1 day and under 1 week	Weeks				Total under 4 weeks	4 weeks to 3 months	Months		
						1–	2–	3–	4–	5–	6–		0–	1–	2–	3–			3–	6–	9–12
England and Wales																					
All Infants	M.	**36·5**	**1·0**	**7·7**	**8·7**	**3·2**	**2·4**	**1·5**	**0·9**	**0·7**	**0·5**	**9·2**	**17·8**	**1·9**	**1·1**	**1·0**	**21·8**	**5·5**	**4·9**	**2·6**	**1·6**
	F.	**28·0**	**1·0**	**5·6**	**6·6**	**2·5**	**1·6**	**1·0**	**0·7**	**0·5**	**0·4**	**6·7**	**13·2**	**1·6**	**0·9**	**0·8**	**16·6**	**4·1**	**3·8**	**2·2**	**1·3**
	P.	**32·4**	**1·0**	**6·7**	**7·6**	**2·9**	**2·0**	**1·3**	**0·8**	**0·6**	**0·5**	**8·0**	**15·6**	**1·8**	**1·0**	**0·9**	**19·3**	**4·8**	**4·4**	**2·4**	**1·4**
Legitimate	M.	**35·8**	0·8	7·6	8·4	3·1	2·3	1·5	0·9	0·7	0·5	9·0	17·4	1·9	1·0	1·0	21·3	5·4	4·9	2·6	1·6
	F.	**27·3**	0·7	5·4	6·2	2·4	1·5	1·0	0·7	0·5	0·4	6·5	12·7	1·6	0·9	0·8	16·0	4·1	3·8	2·2	1·3
	P	**31·7**	0·8	6·5	7·3	2·8	1·9	1·3	0·8	0·6	0·4	7·8	15·1	1·8	1·0	0·9	18·7	4·8	4·3	2·4	1·4
Illegitimate	M.	**48·3**	4·2	10·2	14·4	4·5	3·3	1·7	0·9	0·8	0·6	11·9	26·2	1·9	1·7	1·4	31·2	7·6	5·6	2·4	1·5
	F.	**41·0**	5·2	8·4	13·6	3·3	2·8	1·2	0·9	0·7	0·8	9·8	23·5	2·4	1·1	1·1	28·0	5·4	4·3	2·0	1·3
	P.	**44·8**	4·7	9·3	14·0	3·9	3·1	1·5	0·9	0·8	0·7	10·9	24·9	2·1	1·4	1·2	29·7	6·5	5·0	2·2	1·4
South East		**25·4**	0·9	6·0	6·9	2·8	1·7	1·1	0·7	0·4	0·4	7·1	14·0	1·3	0·8	0·7	16·7	3·2	2·7	1·7	1·1
Greater London		**25·2**	1·0	6·0	7·0	2·7	1·6	1·2	0·7	0·5	0·4	7·2	14·2	1·2	0·7	0·6	16·7	3·3	2·7	1·4	1·0
Remainder of South East		**25·6**	0·8	6·0	6·8	2·8	1·8	1·0	0·6	0·4	0·4	6·9	13·7	1·4	0·9	0·7	16·7	3·1	2·7	1·9	1·1
North		**39·0**	1·0	7·3	8·3	3·0	2·2	1·3	0·9	0·7	0·5	8·5	16·8	2·1	1·3	1·1	21·3	6·7	6·1	3·1	1·7
North I		**42·9**	1·1	8·6	9·2	3·0	2·1	1·2	1·0	0·5	0·6	8·5	17·7	2·4	1·3	1·0	22·4	7·4	7·7	3·6	1·8
North II		**38·4**	0·7	6·5	7·2	2·4	2·7	1·3	1·1	0·8	0·5	8·8	16·0	2·0	1·1	0·8	19·9	6·6	7·0	3·2	1·7
North III		**35·8**	0·8	7·7	8·5	3·2	1·8	1·2	0·6	0·6	0·4	7·8	16·4	2·1	1·3	1·2	20·9	5·6	5·1	2·7	1·5
North IV		**39·5**	1·1	7·0	8·1	3·0	2·2	1·5	1·0	0·7	0·4	8·8	16·9	1·9	1·3	1·2	21·3	7·1	5·9	3·2	1·9
Midland		**32·5**	1·0	6·5	7·5	2·7	2·2	1·3	0·8	0·5	0·5	8·0	15·5	1·9	0·9	0·9	19·2	4·7	4·5	2·5	1·6
Midland I		**32·6**	1·1	6·6	7·7	2·8	2·1	1·2	0·8	0·5	0·5	7·9	15·7	2·0	1·0	0·9	19·6	4·8	4·4	2·3	1·5
Midland II		**32·4**	0·8	6·4	7·2	2·5	2·3	1·4	0·8	0·5	0·5	8·0	15·2	1·6	0·8	0·8	18·3	4·6	4·6	2·8	1·9
East		**29·6**	0·8	6·6	7·4	2·7	2·0	1·3	0·6	0·8	0·5	7·7	15·1	2·0	0·7	0·6	18·4	4·1	3·6	2·3	1·1
South West		**28·4**	0·8	6·6	7·5	3·0	1·9	1·5	0·9	0·8	0·3	8·4	15·9	1·9	1·0	0·8	19·6	3·1	2·8	1·6	1·3
Wales		**39·3**	1·2	7·3	8·6	3·3	2·3	1·8	1·0	0·7	0·7	9·7	18·3	2·3	1·2	1·1	22·9	6·1	5·5	3·3	1·6
Wales I		**40·0**	1·4	7·4	8·8	3·1	2·3	1·8	1·0	0·7	0·6	9·5	18·3	2·3	1·2	1·3	23·1	6·4	5·5	3·3	1·7
Wales II		**37·6**	0·7	7·2	7·9	3·8	2·2	1·7	1·0	0·8	0·9	10·4	18·3	2·3	1·2	0·6	22·4	5·2	5·4	3·2	1·4
County boroughs*		**36·9**	1·1	6·8	7·9	3·1	2·0	1·3	0·8	0·6	0·4	8·2	16·1	2·2	1·1	0·8	20·3	6·3	5·5	3·1	1·7
Other urban districts*		**32·9**	0·9	6·9	7·8	2·7	2·2	1·3	0·9	0·6	0·5	8·2	16·0	1·6	1·2	1·1	19·9	4·6	4·5	2·5	1·5
Rural districts*		**30·6**	0·9	6·7	7·6	2·8	2·0	1·3	0·7	0·6	0·5	7·8	15·4	1·8	0·9	0·9	19·0	4·4	3·9	2·1	1·3

* Excluding Greater London.

The infant mortality rate for each region is shown by sex in Table VIII and by age in Tables IX and X. In addition, Table VIII exhibits the regional rates as percentages of the rate for England and Wales. The rates in these tables have been corrected for changing birth rate and time lag in registration on the assumption that their effects were the same in each region as in England and Wales as a whole.

The differences between the regions were considerable. They may be summarised by showing for each main region the averaged annual rates for 1948 and 1949 relating to stillbirths, and to neonatal and postnatal mortality.

Rate	Greater London	Remainder of South East	South West	Midlands	East	North	Wales
Stillbirth	20	20	22	23	23	26	28
Neonatal	16	17	20	20	18	22	23
Postnatal	10	9	9	14	11	18	17

The following conclusions are drawn from Tables VIII, IX and X :—

(1) The highest infant mortality rates were still found in the North of England, particularly in Lancashire and Cheshire (North IV) ; and Durham and Northumberland (North I) ; and in Wales.

(2) The lowest infant mortality rates were experienced in South East England. Despite the highly urbanised character of Greater London, the rate there was no higher than that for the rest of the region.

(3) The regional differences in respect of stillbirths were broadly similar to those for neonatal mortality. Wales and the North of England had the worst rates in 1948. Greater London and South East England registered the most favourable figures. Variations in the regional ratio of neonatal deaths to stillbirths were discussed in the Review for 1946–47 on pages 38–41.

(4) Regional variation was more marked for postnatal rates than for either neonatal or stillbirth rates, the differences being least among the latter. These facts are clearly seen when the other regional rates shown above are expressed as percentages of the rate in Greater London (average of 1948 and 1949).

Rate	Greater London	Remainder of South East	South West	Midlands	East	North	Wales
Stillbirth	100	100	110	115	115	130	140
Neonatal	100	106	125	125	113	138	144
Postnatal	100	90	90	140	110	180	170

Differences according to class of area.—Tables IX and X also show the infant mortality rates at various ages in 1948 and 1949 for Greater London and for the three density aggregates covering the rest of England and Wales. Greater London maintained the favourable position experienced in recent years, followed by in most cases the aggregate of rural districts. Though predominantly agricultural, some rural districts may contain, in addition to strictly rural areas, the fringes of residential suburbs surrounding large towns or small mining villages.

The following distribution of the averaged annual stillbirth, neonatal and postnatal rates for 1948 and 1949 among the density aggregates brings out the salient facts.

Density aggregate	*Stillbirth rate*	*Neonatal rate*	*Postnatal rate*
Greater London	20	16	10
County boroughs*	24	20	17
Other urban districts*	24	20	14
Rural districts*	23	20	12

* Excluding Greater London.

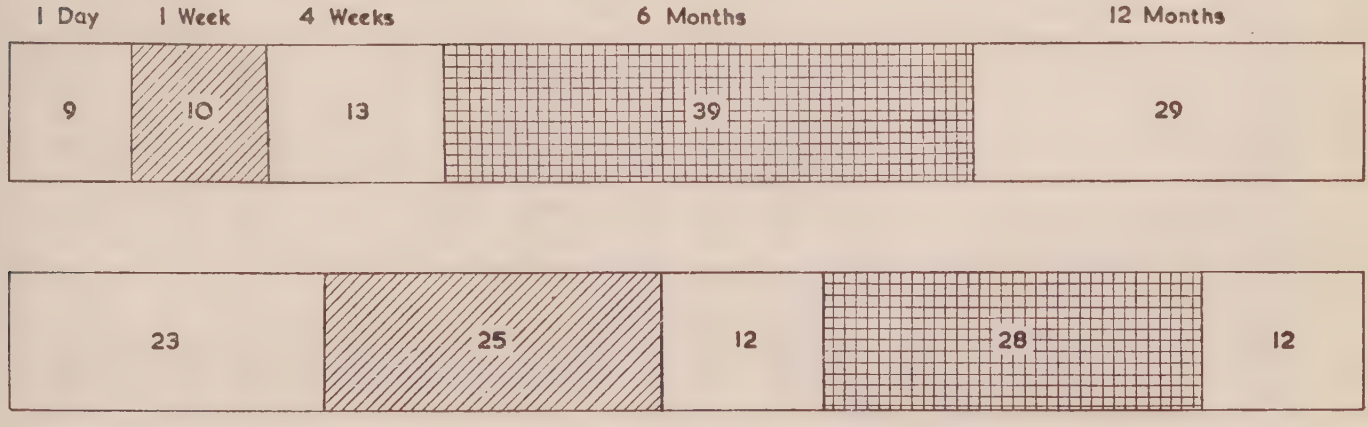
This table emphasises very clearly the great lead which Greater London held in respect of all three rates, and shows that for the rest of England and Wales differences according to the degree of urbanisation were least for stillbirths and the neonatal period and greatest in the postnatal period. Whatever may be the unfavourable factors associated with urban life, they appear to be more active after the first four weeks, particularly in the county boroughs, and reference to Tables IX and X show that the postnatal differences were most marked at ages between the 1st and 6th months. The county borough rate is heavily weighted by the older industrial areas in the North of England.

Certified causes of infant mortality in 1948 and 1949

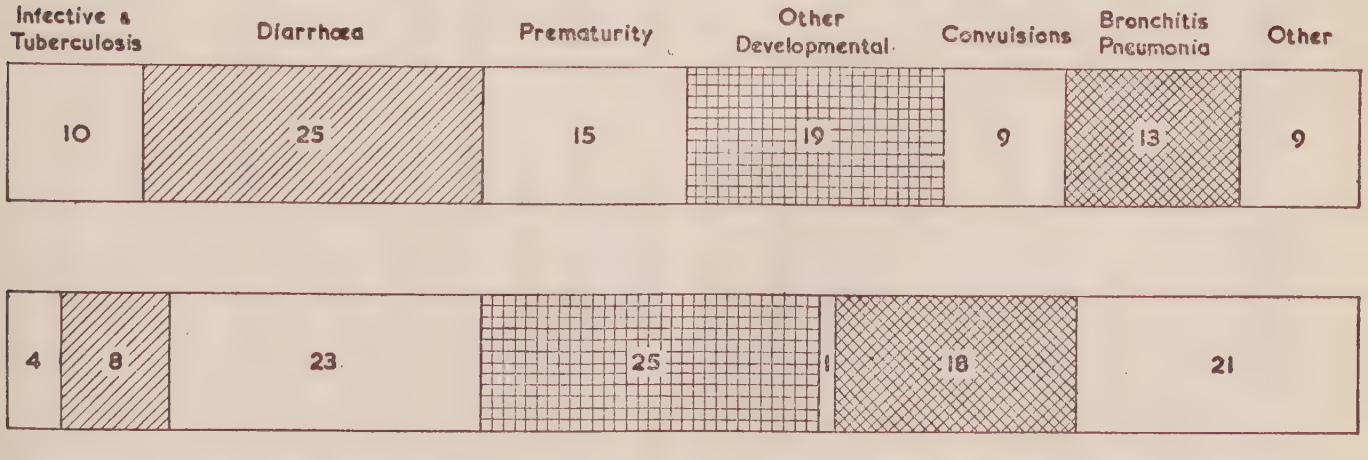
Table 22 of Part I gives the numbers of deaths with details of cause and age, and Table 13A shows a full age analysis of certain causes.

In the lower parts of Table XVI the rates in 1948 and 1949 for all infants under one year and for the neonatal period are shown separately. Table XI, based on the number of deaths given in Table 13A, gives a detailed age distribution of the infant mortality rates in 1948 and 1949 for the principal causes.

Diagram 1



Percentage distribution of deaths at ages under one year, 1906 and 1949,



Percentage distribution of causes of infant deaths, 1906 and 1949.

Table XIa.—Infant Mortality by Sex from Certain Causes at Various Ages, 1948. Rates per 1,000 Related Live Births.

International List No.	Cause of death		Total under 1 year	Under 30 mins.	30 mins. and under 1 day	Total under 1 day	Days						1 day and under 1 week	Weeks				Total under 4 weeks	4 weeks to 3 mths.	Months		
							1–	2–	3–	4–	5–	6–		0–	1–	2–	3–			3–	6–	9–12
106	Bronchitis	M.	0·91	—	—	—	—	0·00	—	—	—	—	0·00	0·00	0·01	0·03	0·03	0·08	0·33	0·31	0·14	0·05
		F.	0·71	—	—	—	—	0·01	—	0·01	—	—	0·01	0·01	0·02	0·02	0·03	0·09	0·21	0·21	0·12	0·08
107–9	Pneumonia (all forms)	M.	6·01	0·00	0·02	0·03	0·03	0·07	0·07	0·05	0·06	0·05	0·33	0·36	0·27	0·24	0·24	1·12	1·86	1·74	0·90	0·39
		F.	4·90	—	—	—	0·01	0·05	0·04	0·02	0·05	0·05	0·22	0·22	0·20	0·16	0·17	0·75	1·45	1·53	0·74	0·43
119	Enteritis and diarrhœa	M.	3·34	0·00	—	0·00	—	—	0·00	0·00	0·01	—	0·01	0·02	0·06	0·09	0·14	0·31	1·14	1·09	0·55	0·25
		F.	2·39	—	—	—	—	—	0·00	0·00	0·01	0·00	0·01	0·01	0·06	0·09	0·09	0·26	0·77	0·82	0·37	0·17
157	Congenital malformations	M.	4·79	0·06	0·57	0·63	0·23	0·28	0·27	0·16	0·16	0·14	1·24	1·87	0·46	0·28	0·20	2·81	1·05	0·59	0·23	0·11
		F.	4·09	0·10	0·54	0·64	0·21	0·23	0·19	0·19	0·14	0·13	1·08	1·71	0·51	0·23	0·21	2·66	0·62	0·49	0·21	0·11
158	Congenital debility	M.	0·46	0·01	0·04	0·06	0·01	0·04	0·02	0·01	0·01	0·01	0·11	0·16	0·03	0·02	0·03	0·25	0·15	0·06	0·00	0·00
		F.	0·35	0·01	0·03	0·05	0·02	0·01	0·01	0·01	0·01	0·01	0·07	0·11	0·03	0·03	0·03	0·20	0·11	0·04	0·00	0·00
159	Premature birth	M.	9·28	0·31	4·27	4·58	1·39	0·83	0·49	0·27	0·21	0·14	3·34	7·92	0·63	0·25	0·18	8·98	0·29	0·01	—	—
		F.	7·40	0·26	2·93	3·19	1·29	0·69	0·37	0·24	0·20	0·16	2·95	6·14	0·57	0·27	0·15	7·12	0·27	0·01	0·00	—
160 (*a*)	Intra-cranial or spinal hæmorrhage due to injury at birth.	M.	2·30	0·10	0·79	0·89	0·41	0·31	0·23	0·14	0·05	0·04	1·18	2·07	0·13	0·04	0·01	2·27	0·03	0·00	0·00	0·00
		F.	1·30	0·09	0·49	0·57	0·22	0·14	0·09	0·09	0·03	0·03	0·60	1·17	0·08	0·02	0·01	1·28	0·02	—	0·00	0·00
(*b*)	Other intra-cranial or spinal injuries at birth.	M.	0·09	0·00	0·03	0·03	0·01	0·01	0·01	0·00	0·00	0·00	0·03	0·07	0·01	0·01	—	0·08	0·01	—	—	—
		F.	0·06	0·01	0·02	0·02	0·01	0·01	0·00	0·01	—	—	0·02	0·05	0·01	—	—	0·05	—	—	—	0·01
(*c*)	Other birth injuries	M.	0·78	0·15	0·34	0·49	0·11	0·06	0·05	0·02	0·01	—	0·25	0·74	0·02	0·00	0·01	0·77	0·01	0·00	0·00	0·00
		F.	0·59	0·10	0·29	0·39	0·08	0·04	0·02	0·01	0·00	0·01	0·17	0·56	0·01	0·01	0·01	0·59	0·00	0·00	—	0·00
161 (*a*)	Asphyxia during or after birth, atelectasis.	M.	3·19	0·15	1·40	1·56	0·62	0·36	0·19	0·09	0·04	0·04	1·35	2·91	0·16	0·05	0·03	3·16	0·03	—	0·00	—
		F.	2·29	0·13	1·06	1·19	0·40	0·22	0·11	0·08	0·07	0·04	0·92	2·11	0·09	0·05	0·03	2·27	0·02	0·00	0·00	—
(*b*)	Intoxication due to maternal toxæmia.	M.	0·23	0·01	0·11	0·12	0·02	0·02	0·03	0·01	—	0·00	0·09	0·21	0·02	0·00	0·00	0·23	—	0·00	—	—
		F.	0·17	0·01	0·06	0·07	0·03	0·02	0·03	0·01	0·00	0·01	0·09	0·16	0·00	0·01	0·00	0·17	0·00	—	—	—
(*c*1)	Infection of the umbilicus	M.	0·05	—	0·00	0·00	—	—	0·00	0·00	0·00	—	0·01	0·01	0·01	0·01	0·00	0·04	0·01	—	—	—
		F.	0·05	—	—	—	—	—	0·00	0·01	—	0·01	0·02	0·02	0·01	0·01	0·01	0·04	0·01	—	—	—
(*c*2)	Pemphigus neonatorum	M.	0·03	—	—	—	—	0·00	0·00	—	—	—	0·00	0·00	0·00	0·00	0·00	0·02	0·01	0·00	—	—
		F.	0·01	—	—	—	—	0·00	—	—	—	—	0·00	0·00	—	0·01	0·01	0·01	0·00	—	—	—
(*c*3)	Other or unspecified infections included under 161 (*c*).	M.	0·04	—	—	—	0·00	0·00	—	—	0·00	0·00	0·01	0·01	0·01	0·01	0·00	0·04	0·00	—	—	—
		F.	0·04	—	—	—	—	—	—	0·00	0·00	—	0·01	0·01	0·02	0·01	0·00	0·03	0·01	—	—	—
(*d*)	Melæna neonatorum	M.	0·28	—	0·02	0·02	0·03	0·04	0·05	0·03	0·01	0·01	0·19	0·21	0·05	0·02	0·00	0·28	0·00	—	—	0·00
		F.	0·22	—	0·04	0·04	0·03	0·05	0·02	0·02	0·01	0·01	0·14	0·17	0·03	0·01	0·00	0·21	0·01	0·00	—	—
(*e*1)	Hæmolytic diseases of the newborn.	M.	0·84	0·03	0·16	0·19	0·07	0·15	0·12	0·07	0·04	0·02	0·49	0·68	0·08	0·03	0·01	0·79	0·04	0·01	0·00	—
		F.	0·58	0·03	0·11	0·14	0·06	0·07	0·09	0·05	0·04	0·02	0·33	0·47	0·06	0·01	0·01	0·55	0·03	0·00	—	0·00
(*e*2)	Other diseases included under 161 (*e*).	M.	0·09	0·00	0·01	0·02	0·01	0·01	0·01	0·00	0·00	0·01	0·04	0·06	0·02	0·00	0·01	0·09	0·00	0·00	—	—
		F.	0·07	0·01	0·02	0·02	—	0·01	0·00	0·01	0·00	0·00	0·02	0·05	0·01	0·01	0·00	0·06	0·01	—	—	—
	Other causes	M.	5·28	0·19	0·07	0·26	0·03	0·04	0·05	0·04	0·01	0·02	0·19	0·45	0·13	0·13	0·16	0·87	1·33	1·43	0·96	0·69
		F.	4·31	0·15	0·07	0·23	0·04	0·03	0·03	0·04	0·01	0·02	0·16	0·39	0·13	0·11	0·11	0·73	1·06	1·11	0·84	0·57

Table XIb.—Infant Mortality by Sex from Certain Causes at Various Ages, 1949. Rates per 1,000 Related Live Births.

International List No.	Cause of death		Total under 1 year	Under 30 mins.	30 mins. and under 1 day	Total under 1 day	Days						1 day and under 1 week	Weeks				Total under 4 weeks	4 weeks to 3 mths.	Months		
							1–	2–	3–	4–	5–	6–		0–	1–	2–	3–			3–	6–	9–12
106	Bronchitis	M.	0·76	—	—	—	—	0·00	0·00	0·01	0·00	—	0·01	0·01	0·02	0·01	0·03	0·08	0·23	0·28	0·11	0·06
		F.	0·60	—	—	—	0·00	—	0·00	0·00	—	—	0·01	0·01	0·01	0·01	0·03	0·06	0·19	0·20	0·10	0·05
107–109	Pneumonia (all forms)	M.	5·67	0·01	0·03	0·03	0·04	0·07	0·07	0·08	0·04	0·03	0·34	0·37	0·23	0·20	0·23	1·04	1·65	1·69	0·84	0·45
		F.	4·52	—	0·00	0·00	0·03	0·02	0·04	0·04	0·03	0·05	0·20	0·20	0·20	0·17	0·16	0·73	1·34	1·39	0·73	0·33
119	Enteritis and diarrhœa	M.	3·02	—	—	—	—	—	0·00	0·00	0·00	0·00	0·01	0·01	0·04	0·10	0·15	0·29	0·97	0·96	0·54	0·26
		F.	2·22	—	—	—	—	0·00	—	0·00	0·00	0·00	0·01	0·01	0·02	0·07	0·10	0·19	0·72	0·78	0·35	0·18
157	Congenital malformations	M.	4·84	0·10	0·57	0·67	0·28	0·28	0·23	0·14	0·16	0·13	1·21	1·88	0·55	0·27	0·20	2·89	1·05	0·51	0·25	0·14
		F.	4·32	0·10	0·50	0·60	0·26	0·26	0·18	0·18	0·12	0·14	1·14	1·74	0·49	0·26	0·23	2·72	0·74	0·46	0·25	0·15
158	Congenital debility	M.	0·32	0·01	0·05	0·05	0·02	0·02	0·02	0·01	0·01	0·00	0·08	0·13	0·01	0·01	0·01	0·16	0·11	0·05	0·00	—
		F.	0·19	0·01	0·04	0·05	0·01	0·01	0·00	0·01	0·00	0·00	0·04	0·08	0·01	0·02	—	0·11	0·05	0·02	0·01	0·00
159	Premature birth	M.	8·61	0·31	3·97	4·29	1·29	0·86	0·43	0·24	0·22	0·16	3·20	7·49	0·54	0·23	0·13	8·39	0·21	0·01	—	—
		F.	6·53	0·24	2·82	3·06	1·13	0·61	0·36	0·24	0·12	0·12	2·58	5·64	0·43	0·17	0·12	6·35	0·17	0·01	—	—
160 (*a*)	Intra-cranial or spinal hæmorrhage due to injury at birth.	M.	2·34	0·11	0·81	0·92	0·41	0·33	0·23	0·11	0·08	0·04	1·20	2·11	0·12	0·03	0·01	2·28	0·04	0·01	0·01	0·00
		F.	1·40	0·08	0·48	0·56	0·26	0·21	0·10	0·07	0·04	0·02	0·69	1·26	0·09	0·03	0·01	1·38	0·02	—	—	—
(*b*)	Other intra-cranial or spinal injuries at birth.	M.	0·16	0·01	0·03	0·04	0·02	0·02	0·02	0·02	0·02	0·00	0·10	0·14	0·01	—	—	0·15	—	0·01	—	—
		F.	0·11	0·01	0·02	0·03	0·01	0·02	0·02	0·01	—	—	0·06	0·08	0·01	—	—	0·10	0·01	0·00	—	—
(*c*)	Other birth injuries	M.	0·67	0·08	0·30	0·38	0·12	0·07	0·03	0·01	0·01	0·01	0·25	0·63	0·02	0·00	0·00	0·66	0·01	—	—	—
		F.	0·51	0·08	0·22	0·30	0·09	0·04	0·02	0·01	0·01	0·01	0·17	0·47	0·02	0·01	—	0·50	0·01	0·00	—	—
161 (*a*)	Asphyxia during or after birth, atelectasis.	M.	3·77	0·15	1·56	1·71	0·85	0·42	0·27	0·12	0·05	0·05	1·75	3·47	0·14	0·06	0·04	3·71	0·05	0·01	—	—
		F.	2·78	0·19	1·20	1·39	0·56	0·26	0·15	0·06	0·07	0·04	1·16	2·55	0·13	0·06	0·02	2·76	0·02	0·00	0·00	—
(*b*)	Intoxication due to maternal toxæmia.	M.	0·22	0·01	0·10	0·11	0·04	0·02	0·02	0·01	0·01	0·00	0·10	0·21	0·01	—	—	0·22	0·00	—	—	—
		F.	0·15	0·01	0·05	0·06	0·03	0·02	0·01	0·00	0·01	0·00	0·07	0·13	0·02	—	—	0·15	—	—	—	—
(*c*1)	Infection of the umbilicus	M.	0·05	—	—	—	—	0·00	—	—	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·04	0·01	—	—	—
		F.	0·02	—	—	—	—	—	—	—	—	—	—	—	—	0·01	0·00	0·01	0·01	—	—	—
(*c*2)	Pemphigus neonatorum	M.	0·01	—	—	—	—	—	—	—	0·00	—	0·00	0·00	—	—	—	0·00	0·01	—	—	—
		F.	0·01	—	—	—	—	—	—	—	—	0·00	0·00	0·00	—	0·00	0·00	0·01	0·00	—	—	—
(*c*3)	Other and unspecified infections included under 161 (*c*)	M.	0·04	—	0·00	0·00	—	—	—	—	—	—	—	0·00	0·02	0·00	0·00	0·03	0·01	—	—	—
		F.	0·03	—	—	—	—	—	—	—	—	—	—	—	0·01	0·00	0·01	0·02	0·01	—	—	—
(*d*)	Melæna neonatorum	M.	0·28	0·00	0·03	0·03	0·05	0·06	0·03	0·02	0·02	0·01	0·19	0·23	0·03	0·01	0·01	0·27	0·00	—	0·01	—
		F.	0·18	0·01	0·03	0·03	0·01	0·04	0·02	0·02	0·01	0·01	0·11	0·15	0·02	—	—	0·17	0·01	—	—	—
(*e*1)	Hæmolytic diseases of the newborn.	M.	0·79	0·01	0·14	0·15	0·07	0·18	0·14	0·07	0·04	0·01	0·51	0·66	0·07	0·01	0·02	0·76	0·02	0·01	—	—
		F.	0·62	0·05	0·17	0·23	0·03	0·10	0·08	0·06	0·03	0·01	0·30	0·53	0·05	0·01	0·01	0·59	0·01	0·01	0·01	0·00
(*e*2)	Other diseases included under 161 (*e*).	M.	0·07	0·00	0·01	0·01	0·01	0·00	0·01	0·01	0·00	0·00	0·03	0·05	0·01	0·00	0·00	0·06	0·01	—	—	—
		F.	0·04	—	—	—	0·01	0·00	0·00	—	0·01	—	0·02	0·02	0·02	0·01	—	0·04	0·00	—	—	—
	Other causes	M.	4·84	0·18	0·07	0·25	0·03	0·04	0·04	0·03	0·01	0·02	0·17	0·42	0·10	0·11	0·15	0·77	1·16	1·40	0·87	0·64
		F.	3·78	0·19	0·06	0·26	0·03	0·02	0·02	0·01	0·02	0·02	0·12	0·38	0·12	0·10	0·10	0·70	0·84	0·91	0·75	0·58

Differences by cause between the sexes.—Table XII compares mortality from certain causes amongst male and female infants. As already pointed out, the infant mortality rate from all causes among males has consistently exceeded the corresponding rate for females. The male excess was more marked for some causes than for others, particularly for premature birth, injury at birth, convulsions, enteritis and diarrhœa, asphyxia and atelectasis. Of the causes listed in the tables in this Volume the only one which showed a significant excess of female mortality was whooping cough.

Table XII.—Infant Mortality by Cause, Sex and Legitimacy, 1948 and 1949.

		Rates per 1,000 related live births						Mortality ratios			
		Legitimate		Illegitimate		All Infants		Male per cent. of female rate		Illegitimate per cent. of Legitimate rate	
		Male	Female	Male	Female	Male	Female	All Infants	Illegitimate	Male	Female
	1948										
All causes	Under 4 weeks	21·69	16·71	31·13	23·58	22·20	17·08	130	132	144	141
	4 weeks–3 months	6·14	4·45	9·24	6·89	6·30	4·58	138	134	150	155
	3–6 months	5·18	4·16	6·72	5·16	5·26	4·21	125	130	130	124
	6–9 months	2·79	2·28	2·73	2·54	2·79	2·29	122	107	98	111
	9–12 months	1·50	1·40	1·36	0·99	1·50	1·38	109	137	91	71
All ages under one year	Whooping cough	0·56	0·66	0·46	0·43	0·56	0·64	88	107	82	65
	Tuberculous diseases	0·30	0·30	0·22	0·28	0·28	0·30	93	79	73	93
	Measles	0·13	0·13	0·04	0·18	0·13	0·14	93	22	31	138
	Convulsions	0·29	0·24	0·18	0·25	0·28	0·23	122	72	62	104
	Bronchitis and pneumonia	6·87	5·56	7·84	6·36	6·91	5·61	123	123	114	114
	Enteritis and diarrhœa	3·23	2·32	5·37	3·45	3·34	2·39	140	156	166	149
	Congenital malformations	4·81	4·07	4·56	4·53	4·79	4·09	117	101	95	111
	Premature birth	9·04	7·25	13·71	10·09	9·28	7·40	125	136	152	139
	Injury at birth	3·15	1·96	4·12	1·82	3·19	1·95	164	226	131	93
	Asphyxia, atelectasis	3·19	2·26	3·09	2·91	3·19	2·29	139	106	97	129
	Hæmolytic diseases	0·84	0·59	0·85	0·35	0·84	0·58	145	243	101	59
	Violence	1·33	1·10	1·79	1·49	1·34	1·11	121	120	135	135
	Other and ill-defined causes	3·56	2·56	8·95	7·02	3·92	2·81	140	127	251	274
	All causes	**37·30**	**29·00**	**51·18**	**39·16**	**38·05**	**29·54**	**129**	**131**	**137**	**135**
	1949										
All causes	Under 4 weeks	21·30	15·97	31·21	28·04	21·80	16·57	132	111	147	176
	4 weeks–3 months	5·41	4·06	7·60	5·36	5·53	4·13	134	142	140	132
	3–6 months	4·90	3·75	5·64	4·28	4·94	3·78	131	132	115	114
	6–9 months	2·65	2·22	2·41	2·00	2·63	2·21	119	121	91	90
	9–12 months	1·57	1·30	1·47	1·32	1·57	1·30	121	111	94	102
All ages under one year	Whooping cough	0·48	0·49	0·05	0·31	0·45	0·49	92	16	10	63
	Tuberculous diseases	0·23	0·18	0·24	0·21	0·24	0·19	126	114	104	117
	Measles	0·11	0·11	0·15	0·16	0·12	0·11	109	94	136	145
	Convulsions	0·19	0·15	0·05	0·33	0·19	0·15	127	15	26	220
	Bronchitis and pneumonia	6·37	5·09	7·30	5·66	6·42	5·12	125	129	115	111
	Enteritis and diarrhœa	2·98	2·20	3·77	2·66	3·02	2·22	136	142	127	121
	Congenital malformations	4·88	4·31	4·25	4·82	4·84	4·33	112	88	87	112
	Premature birth	8·37	6·27	13·06	11·50	8·61	6·53	132	114	156	183
	Injury at birth	3·14	1·98	3·55	2·79	3·17	2·01	158	127	113	141
	Asphyxia, atelectasis	3·72	2·68	4·70	4·47	3·77	2·78	136	105	126	167
	Hæmolytic diseases	0·79	0·63	0·83	0·28	0·79	0·61	130	296	105	44
	Violence	1·35	1·05	1·79	1·37	1·37	1·07	128	131	133	130
	Other and ill-defined causes	3·22	2·16	8·59	6·44	3·48	2·38	146	133	263	298
	All causes	**35·83**	**27·30**	**48·33**	**41·00**	**36·47**	**27·99**	**130**	**118**	**135**	**150**

Differences by cause according to legitimacy.—The last two columns of Table XII express the infant mortality rate for illegitimate children as a percentage of that for legitimate children. Premature birth, enteritis and diarrhœa, violence, and the group "other and ill-defined causes", registered particularly high rates among illegitimate infants compared with those for legitimate infants.

Regional distribution by cause.—Table XIII gives cause-specific rates of infant mortality in 1948 and 1949 for each of the main regions and compares them in terms of the percentage each bears to the average rate for England and Wales as a whole.

Table XIII.—Comparison of Infant Mortality from the Principal Causes, in Geographical Regions—Rates per 100,000 Related Live Births in 1948 and 1949 and per cent. of the England and Wales Rate.

Cause of death	Rates per 100,000 Related Live Births		Per cent. of England and Wales		Rates per 100,000 Related Live Births		Per cent. of England and Wales		Rates per 100,000 Related Live Births		Per cent. of England and Wales		Rates per 100,000 Related Live Births		Per cent. of England and Wales	
	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949
	ENGLAND AND WALES				GREATER LONDON				REMAINDER OF SOUTH EAST				NORTH REGION			
Measles	13	11	100	100	9	5	69	45	2	6	15	55	21	17	162	155
Whooping cough	59	47	100	100	58	29	98	62	43	24	73	51	64	64	108	136
Tuberculosis	30	21	100	100	19	8	63	38	20	18	67	86	35	30	117	143
Bronchitis and pneumonia	627	580	100	100	444	359	71	62	376	354	60	61	855	785	136	135
Diarrhœa and enteritis	288	263	100	100	189	127	66	48	141	145	49	55	445	412	155	157
Congenital malformations	445	459	100	100	427	413	96	90	392	417	88	91	476	491	107	107
Premature birth	837	760	100	100	581	581	69	76	719	638	86	84	986	911	118	120
Injury at birth	259	260	100	100	225	234	87	90	229	235	88	90	263	287	102	110
Violence	127	124	100	100	122	106	96	85	130	120	102	97	125	143	98	115
Congenital debility	40	26	100	100	12	8	30	31	26	25	65	96	56	34	140	131
Convulsions	27	18	100	100	5	4	19	22	6	3	22	17	43	28	159	156
Other causes	641	668	100	100	596	642	93	96	577	579	90	87	703	701	110	105
All Causes Under 1 year	**3,393**	**3,237**	**100**	**100**	**2,687**	**2,516**	**79**	**78**	**2,661**	**2,564**	**78**	**79**	**4,072**	**3,903**	**120**	**121**
All Causes Under 1 month	**1,972**	**1,927**	**100**	**100**	**1,614**	**1,674**	**82**	**87**	**1,754**	**1,673**	**89**	**87**	**2,176**	**2,127**	**110**	**110**
	MIDLAND REGION				EAST REGION				SOUTH WEST REGION				WALES			
Measles	14	11	108	100	6	9	46	82	2	10	15	91	22	13	169	118
Whooping cough	68	57	115	121	69	28	117	60	58	47	98	100	59	56	100	119
Tuberculosis	39	23	130	110	16	9	53	43	26	19	87	90	39	30	130	143
Bronchitis and pneumonia	654	625	104	108	472	509	75	88	412	459	66	79	779	690	124	119
Diarrhœa and enteritis	309	285	107	108	174	185	60	70	120	90	42	34	249	298	86	113
Congenital malformations	462	461	104	100	391	421	88	92	446	473	100	103	456	534	102	116
Premature birth	876	684	105	90	751	754	90	99	766	520	92	68	1,100	1,003	131	132
Injury at birth	303	257	117	99	220	234	85	90	273	286	105	110	302	274	117	105
Violence	122	94	96	76	100	130	79	105	108	120	85	97	149	158	117	127
Congenital debility	38	26	95	100	50	38	125	146	51	21	128	81	88	38	220	146
Convulsions	17	13	63	72	14	15	52	83	13	12	48	67	104	67	385	372
Other causes	681	715	106	107	580	627	90	94	544	781	85	117	579	772	90	116
All Causes Under 1 year	**3,583**	**3,251**	**106**	**100**	**2,843**	**2,959**	**84**	**91**	**2,819**	**2,838**	**83**	**88**	**3,926**	**3,933**	**116**	**122**
All Causes Under 1 month	**2,104**	**1,916**	**107**	**99**	**1,731**	**1,841**	**88**	**96**	**1,971**	**1,963**	**100**	**102**	**2,245**	**2,289**	**114**	**119**

The excess shown by the North region for the overall rate was shared among all the causes listed, but was greatest for convulsions, diarrhœa and enteritis, bronchitis and pneumonia, and measles. The three last-named conditions are characteristically encountered in the later months of infancy which, as shown earlier in Table XI, have a relatively greater excess mortality in the North as compared with the South than has the neonatal period.

Secular Trends

Secular Trends in Infant Mortality.—Table XIV shows the Infant Mortality Rate at different ages for quinquennia since 1881–85 and each year since 1906, the rates for 1881 to 1905 being for broader age groups than those for later years.

Table XIV.—Age Distribution of Infant Mortality, 1881 to 1949. Rates per 1,000 Live Births.

(*Based on related births from* 1926 *onwards*)

Year	Days		Weeks				Months					Total under one year
	0–1	1–7	0–1	1–2	2–3	3–4	Total under four weeks	Four weeks to 3 months	3–6	6–9	9–12	
1881–1885	—	—	—	—	—	—	67		28	44		139
1886–1890	—	—	—	—	—	—	69		30	46		145
1891–1895	—	—	—	—	—	—	74		31	46		151
1896–1900	—	—	—	—	—	—	74		34	48		156
1901–1905	—	—	—	—	—	—	70		28	40		138
1906–1910	11·5	13·0	24·5	5·8	5·7	4·2	40·2	22·8	22·0	17·3	14·8	117·1
1911–1915	11·4	12·7	24·1	5·7	5·3	3·9	39·0	20·2	19·6	15·9	14·1	108·7
1916–1920	11·0	12·4	23·4	5·6	4·7	3·4	37·0	16·5	14·6	12·0	10·8	90·9
1921–1925	10·4	11·3	21·7	5·0	3·9	2·8	33·4	12·8	11·3	9·2	8·3	74·9
1926–1930	10·3	11·5	21·8	4·3	3·2	2·4	31·8	10·8	9·5	8·0	7·4	67·6
1931–1935	10·7	11·7	22·4	3·9	2·9	2·2	31·4	9·9	8·5	6·5	5·6	61·9
1936–1940	10·4	11·2	21·5	3·4	2·5	1·8	29·2	8·8	7·8	5·4	4·0	55·3
1941–1945	9·3	9·5	18·7	3·2	2·3	1·7	26·0	8·9	7·7	4·4	2·8	49·8
1906	11·8	13·2	25·0	6·1	6·2	4·6	41·9	25·7	27·0	20·7	17·2	132·5
1907	11·3	13·1	24·4	6·0	5·9	4·5	40·7	23·3	21·3	17·3	15·1	117·6
1908	11·5	12·8	24·3	5·9	5·8	4·3	40·3	24·2	23·6	17·7	14·6	120·4
1909	11·6	13·2	24·7	5·7	5·3	4·0	39·8	20·4	19·2	15·6	13·8	108·7
1910	11·5	12·5	24·1	5·4	5·1	3·8	38·5	20·0	18·8	15·0	13·2	105·4
1911	11·6	12·7	24·3	6·0	6·0	4·5	40·6	24·7	25·9	20·6	17·4	129·2
1912	11·3	12·9	24·2	5·6	5·0	3·7	38·4	17·7	14·9	12·5	11·4	94·7
1913	11·8	12·7	24·5	5·8	5·4	3·9	39·5	20·3	19·8	15·7	13·6	108·9
1914	11·4	12·7	24·1	5·5	5·0	3·9	38·5	19·3	18·7	15·0	13·0	104·4
1915	10·9	12·5	23·4	5·7	5·0	3·7	37·7	18·6	18·2	16·0	15·2	105·8
1916	10·9	12·3	23·2	5·6	4·9	3·4	36·9	16·9	15·2	11·7	10·3	91·1
1917	11·0	12·4	23·4	5·6	4·8	3·4	37·1	16·9	15·0	11·6	10·6	91·1
1918	11·1	12·1	23·2	5·5	4·6	3·4	36·6	17·1	16·1	14·4	13·7	97·9
1919	12·2	13·7	25·9	6·1	4·9	3·6	40·4	16·4	14·4	11·8	10·3	93·2
1920	10·4	11·5	21·9	5·3	4·6	3·3	35·0	15·5	13·0	11·0	10·0	84·5
1921	10·8	11·6	22·4	5·4	4·5	3·0	35·2	14·7	13·7	9·7	7·8	81·2
1922	10·4	11·6	22·0	5·2	4·1	2·8	33·9	12·4	10·6	9·2	8·6	74·7
1923	10·2	10·9	21·1	4·6	3·6	2·6	31·9	11·4	10·0	8·3	7·6	69·2
1924	10·6	11·2	21·8	4·8	3·8	2·6	33·0	12·4	10·8	9·3	8·8	74·2
1925	10·1	11·1	21·2	4·7	3·7	2·7	32·3	12·5	11·2	9·4	9·0	74·5
1926	10·0	11·3	21·3	4·6	3·6	2·5	31·8	11·6	10·3	8·5	7·5	69·8
1927	10·5	11·6	22·1	4·3	3·4	2·5	32·2	10·6	9·5	8·3	7·8	68·5
1928	10·4	11·2	21·6	4·1	3·0	2·4	31·1	10·7	9·3	7·4	6·8	65·3
1929	10·4	11·9	22·2	4·6	3·3	2·6	32·8	11·5	10·6	9·8	9·2	73·9
1930	10·4	11·6	22·0	3·8	2·9	2·2	30·9	9·7	7·9	6·1	5·6	60·2
1931	10·4	11·7	22·1	4·0	3·1	2·4	31·5	10·8	9·2	7·6	6·6	65·7
1932	10·6	11·8	22·4	3·8	3·0	2·4	31·5	10·8	9·0	7·1	6·1	64·5
1933	11·0	11·8	22·9	4·0	3·1	2·2	32·1	9·8	8·6	6·5	5·7	62·7
1934	10·9	11·8	22·7	3·9	2·8	2·0	31·4	8·9	7·7	6·0	5·3	59·3
1935	10·7	11·3	22·0	3·7	2·7	2·0	30·4	9·1	7·7	5·5	4·3	57·0
1936	10·7	11·3	21·9	3·5	2·7	2·0	30·2	9·3	8·3	6·0	4·9	58·7
1937	10·8	11·2	22·0	3·5	2·5	1·8	29·7	9·4	8·3	5·9	4·4	57·7
1938	10·3	10·8	21·1	3·1	2·3	1·7	28·3	8·2	7·3	5·0	4·0	52·8
1939	10·3	10·9	21·2	3·2	2·2	1·7	28·3	7·9	7·0	4·4	2·9	50·6
1940	9·8	11·5	21·3	3·7	2·6	2·0	29·6	9·3	8·2	5·7	4·0	56·8

Table XIV.—Age Distribution of Infant Mortality, 1881 to 1949. Rates per 1,000 Live Births—*continued.*

(*Based on related births from* 1926 *onwards*)

Year	Days		Weeks				Months					Total under one year
	0–1	1–7	0–1	1–2	2–3	3–4	Total under four weeks	Four weeks to 3 months	3–6	6–9	9–12	
1941	10·1	10·6	20·7	3·6	2·6	2·1	29·0	11·3	9·7	5·8	4·3	**60·0**
1942	9·6	10·0	19·6	3·5	2·4	1·8	27·2	8·7	7·5	4·4	2·8	**50·6**
1943	9·1	9·2	18·3	3·1	2·2	1·6	25·2	8·8	7·8	4·5	2·8	**49·1**
1944	8·8	8·8	17·5	3·1	2·2	1·6	24·4	8·0	7·0	3·8	2·3	**45·4**
1945	9·0	9·0	18·0	3·1	2·0	1·7	24·8	8·2	7·0	3·8	2·3	**46·0**
1946	8·7	9·1	17·8	3·2	2·0	1·5	24·5	7·1	6·1	3·3	1·9	**42·9**
1947	7·8	8·7	16·5	2·9	1·9	1·4	22·7	6·9	6·0	3·6	2·1	**41·4**
1948	7·8	7·9	15·6	2·0	1·1	1·0	19·7	5·5	4·8	2·5	1·4	**33·9**
1949	7·6	8·0	15·6	1·8	1·0	0·9	19·3	4·8	4·4	2·4	1·4	**32·4**

Rates in terms of those of 1926–30 taken as 1,000

1926–1930	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**1,000**
1931–1935	1,039	1,017	1,028	907	906	917	987	917	895	813	757	**916**
1936–1940	1,010	974	986	791	781	750	918	815	821	675	541	**818**
1941–1945	903	826	858	744	719	708	818	824	811	550	378	**737**
1931	1,010	1,017	1,014	930	969	1,000	991	1,000	968	950	892	**972**
1932	1,029	1,026	1,028	884	938	1,000	991	1,000	947	888	824	**954**
1933	1,068	1,026	1,050	930	969	917	1,009	907	905	812	770	**927**
1934	1,058	1,026	1,041	907	875	833	987	824	811	750	716	**877**
1935	1,039	983	1,009	860	844	833	956	843	811	688	581	**843**
1936	1,039	983	1,005	814	844	833	950	861	874	750	662	**868**
1937	1,049	974	1,009	814	781	750	934	870	874	738	595	**854**
1938	1,000	939	968	721	719	708	890	759	768	625	541	**781**
1939	1,000	948	972	744	688	708	890	731	737	550	392	**749**
1940	951	1,000	977	860	812	833	931	861	863	712	541	**840**
1941	981	922	950	837	812	875	912	1,046	1,021	725	581	**888**
1942	932	870	899	814	750	750	855	806	789	550	378	**749**
1943	883	800	839	721	688	667	792	815	821	562	378	**726**
1944	854	765	803	721	688	667	767	741	737	475	311	**672**
1945	874	783	826	721	625	708	780	759	737	475	311	**680**
1946	845	791	817	744	625	625	770	657	642	413	257	**635**
1947	757	757	757	674	594	583	714	639	632	450	284	**612**
1948	757	687	716	465	344	417	619	509	505	313	189	**501**
1949	738	696	716	419	313	375	607	444	463	300	189	**479**

Consistency of downward trend of infant mortality.—Apart from minor irregularities due to the seasonal effects of epidemics or inclement weather, and the effects of the two great wars, since 1906 there has been a consistently downward trend in the total infant mortality rate. This trend was continued during 1948 and 1949.

Differential trends shown by neonatal and postnatal mortality rates.—When the neonatal and postnatal trends are considered separately, it is apparent that mortality after the fourth week has been declining more rapidly and for a longer period.

In 1906 the postnatal rate was more than twice the neonatal rate. Such was the comparative rapidity of the reduction that it fell below the more slowly declining neonatal rate in the period 1928–1930. By 1949 it was only about two thirds of the corresponding neonatal figure.

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From 1924 to 1934 the neonatal rate, after a period of slow decline from 1906, remained practically constant. An improvement was already apparent before the outbreak of war in 1939, but the downward trend since 1942 has been in marked contrast to the previous experience and reflects significant advances in all aspects of maternal and obstetric care during the last ten years. The more rapid fall in neonatal mortality of recent years is not, however, confined to England and Wales; it is equally apparent in the statistics published by New Zealand and Australia, the United States of America and the Scandinavian countries, as well as in other parts of the United Kingdom.

Trend of mortality in the first week.—The most important component of the neonatal period is the first seven days. It is clear that for many years after 1906 the rate of mortality in this age group showed very little tendency to fall. On the contrary, from the mid-twenties to the mid-thirties there was a slight tendency for it to rise. The reversal of this upward trend took place shortly before the war, and was barely halted in 1940–41 at a difficult time when all other age periods registered a sharp increase in mortality. The amount ot the decline during the last eight years in terms of the 1906 rate has been considerably greater than for the whole of the preceding thirty six. In 1939 the rate for the first week was 85 per cent. of the 1906 rate whereas in 1949 it was only 62 per cent.

Trend of mortality in the remainder of the neonatal period.—Mortality in the remainder of the neonatal period (1–4 weeks) has shown a straightforward decline from 1906 onwards resembling the characteristic pattern of the postnatal period rather than that of the first week. In particular, it was steadily falling from 1925 to 1935 while mortality in the first week was tending to rise. The fall of 35 per cent. from 1947 to 1948 was quite spectacular and accounted for much of the overall reduction of 13 per cent. in neonatal mortality between these two years. The mortality rate for the first week of infancy in 1948 was only 5 per cent. lower than in 1947.

Trend of mortality in the postnatal period.—The decline in the postnatal rates has been consistent and steep when looked at in perspective, but there were greater irregularities from year to year than in the trend exhibited by the neonatal rate. These are due to the predominating role assumed by periodic epidemics and respiratory infections associated with climatic factors in the morbidity of later infancy.

Considerable reductions have been apparent in the rates since 1943, especially between 1947 and 1948.

Since 1935 the improvement in the rates for the period 4 weeks to 6 months has lagged behind that for the last half of the first year of life and that for the 1–4 weeks period. This may be due to more efficient obstetrical and pædiatric care prolonging for a while the lives of certain infants that otherwise might have died in the neonatal period.

Secular trend of stillbirths.—Stillbirths were not registered in England and Wales prior to 1927. Table XV shows the stillbirth rate for each year from 1928.

The rate remained fairly steady with a slight upward trend from 1928 to 1935, but since 1936 there has been a continued decline which became significantly steeper after 1940. The trend is similar to that for mortality in the early neonatal period (the first week) but in comparison there has been a greater rate of decline since 1941.

Table XV.—Numbers of Stillbirths and Neonatal Deaths and Rates per 1,000 Live and Still Births, 1928 to 1949.

Year	Stillbirths		Neonatal deaths (aged 0–4 weeks)		Combined rate per 1,000 live and still births
	Number	Rate	Number	Rate	
1928	27,580	40·1	20,513	29·8	69·9
1929	26,847	40·0	21,136	31·5	71·5
1930	27,577	40·8	20,060	29·7	70·5
1931	26,933	40·9	19,966	30·3	71·2
1932	26,471	41·3	19,388	30·3	71·6
1933	25,084	41·4	18,688	30·9	72·3
1934	25,209	40·5	18,711	30·0	70·5
1935	25,435	40·7	18,192	29·1	69·8
1936	25,045	39·7	18,254	29·0	68·7
1937	24,806	39·0	18,168	28·6	67·6
1938	24,729	38·3	17,572	27·2	65·5
1939*	24,320	38·1	17,401	27·2	65·3
1940	22,779	37·2	17,503	28·6	65·7
1941	20,876	34·8	16,746	27·9	62·7
1942	22,383	33·2	17,676	26·2	59·4
1943	21,262	30·1	17,251	24·4	54·6
1944	21,306	27·6	18,218	23·6	51·1
1945	19,333	27·6	16,910	24·2	51·8
1946	22,915	27·2	19,857	23·5	50·7
1947	21,795	24·1	20,102	22·3	46·4
1948	18,399	23·2	15,326	19·3	42·5
1949	16,947	22·7	14,106	18·9	41·5

* The births assigned to successive calendar years are the numbers registered up to 1938 inclusive and the numbers of occurrences from 1939.

Stillbirths and neonatal deaths have much in common, in that most of them depend on factors that operate before or during birth. Stillbirths are therefore frequently combined with neonatal deaths, so that a composite rate may be calculated. When this is done, it is usual to express the rate per 1,000 live and still births (total births). Table XV shows the combined rate from 1928 to 1949.

Secular trend of infant mortality by sex and by legitimacy.—Table XVI gives the infant mortality for each sex at different age groups for 1936–39 and each year thereafter. The tendency for the excess mortality among male infants to be greatest in the neonatal period and at the age 4 weeks–3 months, has been consistent and the two sexes have shared equally in the downward trends.

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Table XVI.—Infant Mortality by Age and Legitimacy, and by Cause; Neonatal Mortality by Cause; 1936–39 and each year 1940 to 1949.

	Deaths per 1,000 related live births										
	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
ALL CAUSES											
All male infants											
under 4 weeks	32·5	33·2	32·6	30·3	27·9	27·0	27·7	27·8	25·4	22·2	21·8
4 weeks–3 months	10·2	10·7	13·2	10·1	10·0	9·3	9·4	8·2	8·0	6·3	5·5
3–6 months	8·7	9·6	10·7	8·4	8·9	7·7	7·7	6·7	6·6	5·3	4·9
6–9 months	5·9	6·3	6·4	4·8	5·0	4·1	4·2	3·6	3·9	2·8	2·6
9–12 months	4·4	4·4	4·6	3·0	2·9	2·3	2·5	2·0	2·3	1·5	1·6
Total under 1 year	**61·7**	**64·3**	**67·5**	**56·5**	**54·7**	**50·4**	**51·4**	**48·3**	**46·3**	**38·1**	**36·5**
All female infants											
under 4 weeks	25·6	25·8	25·2	23·9	22·4	21·5	21·7	21·0	19·8	17·1	16·6
4 weeks–3 months	7·1	7·7	9·3	7·2	7·5	6·7	6·9	6·0	5·8	4·6	4·1
3–6 months	6·6	6·7	8·6	6·7	6·6	6·2	6·2	5·4	5·4	4·2	3·8
6–9 months	4·7	5·0	5·2	4·0	4·0	3·5	3·3	3·0	3·3	2·3	2·2
9–12 months	3·6	3·6	4·1	2·6	2·7	2·2	2·1	1·7	1·9	1·4	1·3
Total under 1 year	**47·7**	**48·8**	**52·2**	**44·3**	**43·2**	**40·1**	**40·3**	**37·1**	**36·2**	**29·5**	**28·0**
Illegitimate infants											
under 4 weeks	45·3	44·0	41·0	40·7	36·3	35·5	34·3	33·2	33·4	27·4	29·7
4 weeks–3 months	16·2	15·2	17·5	14·6	15·6	15·5	13·7	12·5	10·9	8·1	6·5
3–6 months	13·9	12·6	13·9	11·7	11·9	10·5	10·1	8·5	8·1	6·0	5·0
6–9 months	7·1	6·7	5·6	5·3	4·9	4·7	3·8	4·1	3·8	2·6	2·2
9–12 months	4·3	3·8	4·3	2·6	2·7	2·3	2·8	1·8	1·8	1·2	1·4
Total under 1 year	**86·8**	**82·4**	**82·3**	**75·0**	**71·4**	**68·5**	**64·8**	**60·1**	**58·0**	**45·3**	**44·8**
All infants under 1 year											
Whooping cough	1·2	0·6	2·1	0·8	0·9	1·0	0·6	0·7	0·6	0·6	0·5
Tuberculous diseases	0·6	0·6	0·7	0·5	0·5	0·4	0·4	0·4	0·4	0·3	0·2
Measles	0·5	0·4	0·6	0·2	0·4	0·1	0·3	0·1	0·3	0·1	0·1
Convulsions	1·3	1·2	1·3	1·0	0·8	0·6	0·6	0·4	0·3	0·3	0·2
Bronchitis and pneumonia	10·5	12·7	13·7	9·2	10·2	8·5	9·3	8·0	7·8	6·3	5·8
Enteritis and diarrhœa	5·1	4·4	4·8	5·2	4·9	4·8	5·1	4·4	5·1	2·9	2·6
Congenital malformations	6·2	6·6	6·6	6·5	5·9	5·5	5·6	5·4	4·9	4·4	4·6
Premature birth	15·5	14·4	14·7	13·7	12·8	11·8	11·0	10·9	9·5	8·4	7·6
Injury at birth	2·7	2·7	2·6	2·6	2·4	2·4	2·7	2·7	2·7	2·6	2·6
Asphyxia atelectasis	2·1	2·3	2·2	2·0	1·8	2·0	2·8	2·9	2·9	2·8	3·3
Hæmolytic disease	0·5	0·5	0·5	0·6	0·6	0·6	0·7	0·7	0·8	0·7	0·7
Operations of war	—	0·3	0·4	0·1	0·0	0·1	0·0	—	—	—	—
Other violence	1·1	1·4	1·6	1·4	1·3	1·4	1·5	1·3	1·4	1·2	1·2
Other and ill-defined causes	7·6	8·7	8·2	6·8	6·6	6·2	5·4	5·0	4·7	3·3	3·0
All causes	**54·9**	**56·8**	**60·0**	**50·6**	**49·1**	**45·4**	**46·0**	**42·9**	**41·4**	**33·9**	**32·4**
All infants under 4 weeks											
Infective diseases	0·20	0·23	0·27	0·16	0·21	0·14	0·13	0·14	0·11	0·07	0·09
Bronchitis	0·30	0·33	0·40	0·19	0·21	0·20	0·16	0·12	0·11	0·08	0·07
Pneumonia	0·85	1·18	1·28	1·14	1·12	1·12	1·23	1·27	1·27	0·94	0·89
Enteritis and diarrhœa	0·46	0·58	0·47	0·61	0·53	0·56	0·74	0·77	0·75	0·28	0·24
Congenital malformations	3·85	4·21	4·07	4·11	3·67	3·45	3·47	3·39	2·99	2·74	2·81
Premature birth	14·30	13·66	13·65	12·80	12·03	11·18	10·42	10·44	9·11	8·08	7·46
Asphyxia atelectasis	2·05	2·20	2·10	1·92	1·74	1·92	2·73	2·87	2·85	2·73	3·25
Congenital debility	1·20	1·12	1·02	0·83	0·61	0·62	0·51	0·46	0·40	0·22	0·14
Hæmolytic disease	5·91	0·49	0·49	0·56	0·56	0·57	0·67	0·64	0·69	0·67	0·68
Other causes		5·61	5·25	4·91	4·54	4·59	4·70	4·36	4·42	3·91	3·76
All causes	**29·12**	**29·61**	**29·00**	**27·23**	**25·22**	**24·35**	**24·76**	**24·46**	**22·70**	**19·72**	**19·22**

This table also cites annual rates at different age periods for illegitimate infants. Conclusions drawn from these rates may be misleading unless the influence of the marked changes in the amount and character of the illegitimate maternity during the war years is taken into account. (Text, Vol. II, Civil, 1940–45, pages 78–83.)

Secular trends by quarters of the year.—Table XVII gives the quarterly rates in each year from 1861. Since 1915 the March quarter has consistently had the highest rates, and the September quarter the lowest. Prior to 1905 more infants died in the September quarter than in any other due to the

prevalence of epidemic diarrhœa, but by 1915 the frequency and size of these epidemics had become much reduced. The rates for the June and December quarters have been very similar for some years.

Table XVII.—Average Rates of Infant Mortality by Quarters, and Average Annual Rates from Diarrhoea and Other Causes, in Quinquennial Periods 1861–1945 and in each Year 1931 to 1949.

Year	Annual average rates*				Quarterly average rates*			
	All causes	Diarrhœal diseases	Respiratory diseases and influenza	Other causes	March	June	September	December
1861–65 ..	151	16	25	110	—	—	—	—
1866–70 ..	157	21	26	110	—	—	—	—
1871–75 ..	153	20	27	106	151	133	180	149
1876–80 ..	145	17	30	98	147	128	161	143
1881–85 ..	139	15	27	97	140	125	152	139
1886–90 ..	145	18	29	98	146	125	163	147
1891–95 ..	151	21	31	99	151	132	169	151
1896–1900	156	32	28	96	142	124	212	148
1901–05 ..	138	24	26	88	137	113	162	140
1906–10 ..	117	19	22	76	124	98	120	128
1911–15	110	20	21	69	119	91	120	109
1916–20 ..	90	9	21	60	116	83	75	91
1921–25 ..	76	8	18	50	94	70	62	77
1926–30 ..	68	7	16	45	91	62	51	67
1931–35 ..	62	6	14	42	83	58	47	60
1936–40 ..	55	5	11	39	73	53	43	53
1941–45 ..	50	5	11	34	64	47	40	48
1931 ..	66	5	17	44	94	59	46	64
1932 ..	64	6	14	44	87	61	49	61
1933 ..	63	6	14	43	84	54	49	64
1934 ..	59	5	11	43	81	58	46	54
1935 ..	57	5	11	41	68	58	45	58
1936 ..	59	6	12	41	81	56	44	54
1937 ..	58	5	12	41	72	57	44	58
1938 ..	53	5	10	38	69	50	42	49
1939 ..	51	4	9	38	66	50	41	46
1940 ..	57	4	13	40	79	51	42	55
1941 ..	60	5	14	41	77	61	45	57
1942 ..	51	5	10	36	65	49	42	48
1943 ..	49	5	11	33	60	47	40	50
1944 ..	45	5	9	31	58	42	40	43
1945 ..	46	5	10	31	60	41	37	45
1946 ..	43	4	8	31	56	40	35	43
1947 ..	41	5	8	28	55	40	32	38
1948 ..	34	3	7	24	41	31	28	35
1949 ..	32	3	6	23	40	30	27	32

* Based on registered births 1861-1925, related births 1926–1949.

Trends in the regions.—The efforts in recent years to make more universal provision for antenatal care and infant welfare and the greater prosperity in the older industrial areas which has accompanied full employment might have been expected to bring the infant mortality and stillbirth rates in the North

of England and in Wales nearer the levels prevailing in the South. The following table exhibits the regional rates in each of the years 1939 to 1949 as percentages of those in 1938.

Area	Rate in 1938	Percentage of Rate in 1938										
		1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
STILLBIRTHS												
England and Wales ..	**38·3**	**100**	**95**	**92**	**87**	**79**	**74**	**74**	**71**	**63**	**61**	**61**
Greater London	**31·2**	100	94	97	94	84	77	77	77	68	65	65
Remainder of South East	**34·8**	97	91	85	82	79	74	74	74	62	59	59
South West	**39·4**	95	92	82	82	77	69	67	67	59	56	56
Midlands	**38·0**	100	95	89	87	79	68	71	68	63	63	58
East	**37·0**	97	92	92	87	78	70	76	73	65	62	62
North	**42·3**	100	95	93	88	79	71	71	71	62	62	60
Wales	**51·5**	96	92	84	78	71	67	67	65	55	53	55
INFANT MORTALITY												
England and Wales ..	**52·7**	**96**	**106**	**114**	**96**	**93**	**86**	**87**	**81**	**79**	**64**	**61**
Greater London	**49·7**	88	93	104	93	89	86	78	70	65	54	51
Remainder of South East	**41·9**	91	112	105	96	91	96	94	82	80	64	61
South West	**46·5**	92	108	108	91	86	85	89	84	77	61	61
Midlands	**52·4**	99	109	114	93	93	85	87	86	78	68	62
East	**44·3**	95	110	107	102	96	91	87	80	81	64	67
North	**60·3**	99	106	120	99	97	84	89	86	84	68	65
Wales	**56·7**	105	115	123	102	91	87	95	83	87	69	69

The seasonal influences affecting infant mortality are not uniformly distributed throughout the regions, and the percentage decline from one year to another shown by each has therefore been subject to local influences. Nevertheless, the regional disparities have remained remarkably constant. It is clear that the amount of excess mortality over the national average shown by the North and by Wales in 1948 and 1949 was substantially the same as before. The decline appears to have been actually greater in London and the South.

Separate examination of the trends for neonatal and postnatal mortality disclose, however, a marked difference between them in this respect. In the following table the averaged neonatal and postnatal rates for 1948 and 1949 in each regional group are shown as percentages of the corresponding 1938 figures.

Area	Stillbirths		Neonatal		Postnatal	
	Rate in 1938	1948–49 as percentage of 1938	Rate in 1938	1948–49 as percentage of 1938	Rate in 1938	1948–49 as percentage of 1938
England and Wales	**38·3**	**60**	**28·3**	**69**	**24·4**	**56**
Greater London	31·2	63	22·7	72	27·0	36
Remainder of South East ..	33·8	60	23·9	72	18·0	50
South West	39·4	56	28·3	70	18·2	48
Midlands	38·0	61	29·2	69	23·2	60
East	37·0	62	27·2	66	17·1	65
North	42·3	59	32·4	66	27·9	66
Wales	50·5	54	32·6	70	24·1	69

The greater decline in the South of England, and the consequent increase in the relative excess shown by the Northern and Welsh rates has been confined to the postnatal period. The reduction has been much more uniformly distributed in the neonatal period, but Greater London and the South East, the South West, and Wales, fell just below the average improvement for England and Wales as a whole, while the North and East just exceeded it.

The regional trends in stillbirths, in common with those for neonatal deaths, have been broadly similar. Greater London has shown the least improvement, while the North and Midlands have done slightly better than the national

average. In Wales, the relative improvement has been greater than elsewhere. Although the Welsh stillbirth rate still remained higher than any of the others, the disparity has become less than it was.

Trends in different classes of area.—Table XVIII shows infant mortality rates for urban and rural district aggregates at certain ages for periods of years since 1926, and in Table XIX these rates are compared for the same periods and ages in terms of the corresponding rate in 1926–30 taken as 1,000.

Table XVIII.—Infant Mortality Rates at various stages of Infancy in different classes of area, 1926–49.

Year	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts
	Under 4 weeks				4 weeks to 3 months				3–6 months			
1926–1930 ..	25·21	34·35	33·37	31·84	9·68	12·87	10·40	9·36	9·81	12·01	8·55	7·02
1931–1935 ..	25·42	33·80	32·69	31·41	9·49	11·73	9·13	8·31	9·34	10·40	7·22	6·01
1936–1939 ..	23·57	31·55	29·86	29·62	8·59	10·20	7·88	7·41	8·85	9·49	6·37	5·44
1940–1942 ..	25·49	30·94	28·60	27·31	7·98	12·36	9·06	7·95	7·45	11·27	7·66	6·10
1943–1945 ..	22·44	26·35	25·10	23·66	7·01	10·26	8·11	6·65	6·55	9·20	6·77	5·46
1946 ..	20·86	26·95	24·57	23·71	5·33	9·13	6·73	6·10	4·50	7·86	5·95	4·67
1947 ..	18·33	24·82	23·20	22·65	4·85	9·35	6·39	5·56	4·56	8·36	5·36	4·52
1948 ..	16·14	20·46	20·83	20·09	4·12	6·85	5·29	4·68	3·41	6·14	4·73	3·70
1949 ..	16·74	20·26	19·89	18·97	3·29	6·26	4·59	4·37	2·69	5·53	4·48	3·87
	6–9 months				9–12 months				Total under 1 year			
1926–1930 ..	8·06	10·11	7·69	5·97	7·09	9·75	7·08	5·42	59·85	79·09	67·09	59·61
1931–1935 ..	6·53	8·25	5·75	4·80	5·25	7·21	5·05	4·18	56·03	71·39	59·84	54·71
1936–1939 ..	5·99	6·58	4·56	3·69	4·06	4·88	3·57	3·34	51·06	62·70	52·24	49·50
1940–1942 ..	4·37	6·89	4·91	4·07	2·78	4·78	3·54	3·14	48·07	66·24	53·77	48·57
1943–1945 ..	3·57	4·91	3·87	3·19	2·28	2·79	2·35	2·18	41·85	53·50	46·20	41·13
1946 ..	2·64	4·36	3·11	2·63	1·37	2·29	1·84	1·71	34·70	50·59	42·20	38·82
1947 ..	2·83	4·74	3·32	2·88	1·61	2·65	1·98	1·91	32·18	49·92	40·25	37·52
1948 ..	2·04	3·24	2·45	2·01	1·16	1·75	1·42	1·20	26·87	38·44	34·72	31·68
1949 ..	1·44	3·13	2·50	2·06	1·00	1·71	1·47	1·34	25·16	36·89	32·93	30·61

* Excluding Greater London.

Table XIX.—Infant Mortality at various stages of Infancy in different classes of area, 1931–49, in terms of the corresponding rate in 1926–30 taken as 1,000.

Year	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts	Greater London	County* Boroughs	Other* Urban Districts	Rural* Districts
	Under 4 weeks				4 weeks to 3 months				3–6 months			
1926–1930 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1931–1935 ..	1,008	984	980	986	980	911	878	888	952	866	844	856
1936–1939 ..	935	918	895	930	887	793	758	792	902	790	745	775
1940–1942 ..	1,011	901	857	858	824	960	871	849	759	938	896	869
1943–1945 ..	890	767	752	743	724	797	780	710	668	766	792	778
1946 ..	827	785	736	745	551	709	647	652	459	654	696	665
1947 ..	727	723	695	711	501	726	614	594	465	696	627	644
1948 ..	640	596	624	631	426	532	509	500	348	511	553	527
1949 ..	664	590	596	596	340	486	441	467	274	460	524	551
	6–9 months				9–12 months				Total under 1 year			
1926–1930 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1931–1935 ..	810	816	748	804	740	739	713	771	936	903	892	918
1936–1939 ..	743	651	593	618	573	501	504	616	853	793	779	830
1940–1942 ..	542	682	638	682	392	490	500	579	803	838	801	815
1943–1945 ..	443	486	503	534	322	286	332	402	699	677	689	690
1946 ..	328	431	404	441	193	235	260	315	580	640	629	651
1947 ..	351	469	432	482	227	272	280	352	538	631	600	629
1948 ..	253	320	319	337	164	179	201	221	449	486	518	531
1949 ..	179	310	325	345	141	175	208	247	420	466	491	514

* Excluding Greater London.

There are interesting differences between the urban and rural aggregates in the rate of improvement. In 1926–30 the rural district aggregate had more favourable postnatal rates than Greater London, but their relative position had been reversed by 1946–47. During 1948 and 1949 the Greater London rates were lower than any of the others at each age; the improvement in the postnatal period has been particularly marked since 1941. It has been least in the neonatal period, but reference to Table XVIII shows that in 1926–30 London had been more favourably placed than the other areas. By 1948–49 these areas were succeeding in making up some of the leeway.

County boroughs still recorded the highest rates at each period of infant life, but Table XX shows that the percentage excess in county boroughs outside Greater London over rural districts was substantially lower in 1948 and 1949, being just under 20 compared with over 30 in 1945–47 and 26 in 1936–39. Table XVIII suggests that the improvement was mainly effected in the later postnatal period.

Table XX.—Infant Mortality Rates in London and in Urban and Rural Aggregates, and percentage excess in the County Boroughs compared with the Rural Districts, 1936 to 1949, 1911–14 and 1931–1945.

Year	England and Wales	London Admin. County	County Boroughs*	Other Urban Districts*	Rural Districts*	Per cent. Excess in County Boroughs over Rural Districts
1936 ..	**59**	66	66	55	53	+25
1937 ..	**58**	60	66	55	50	+32
1938 ..	**53**	58	60	50	47	+28
1939 ..	**51**	48	58	49	47	+23
1940 ..	**57**	49	66	56	51	+29
1941 ..	**60**	58	74	57	51	+45
1942 ..	**51**	51	60	49	44	+36
1943 ..	**49**	51	57	48	42	+36
1944 ..	**45**	51	50	45	41	+22
1945 ..	**46**	43	54	46	40	+35
1946 ..	**43**	40	51	42	39	+31
1947 ..	**41**	34	50	40	38	+32
1948 ..	**34**	30	38	35	32	+19
1949 ..	**32**	27	37	33	31	+19
Average Rates						
1911–1914†	**110**	108	125	107	90	+39
1931–1935 ..	**62**	63	71	60	55	+29
1936–1939 ..	**55**	58	63	52	50	+26
1940–1942 ..	**56**	52	66	54	49	+35
1943–1945 ..	**47**	48	54	46	41	+32

* Outside Greater London.

† 1911–1914 based on registered births. All other rates based on related births.

Table XX distinguishes London Administrative County instead of Greater London and indicates that the great improvement evident in Greater London, and discussed above, was not confined to the "Outer Ring." For 1948 and 1949 the infant mortality rates in Greater London were 27 and 25, and in London County 30 and 27.

The following table shows the stillbirth rates in the density aggregates from 1939 to 1949 as percentages of those prevailing in 1938.

Area	1938 still-birth rate	Percentage of stillbirth rate in 1938										
		1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Greater London	31	100	94	97	94	84	77	77	77	68	65	65
County boroughs* ..	40	100	95	90	88	77	73	73	73	63	60	60
Other urban districts* ..	41	98	93	88	83	78	68	71	68	61	59	56
Rural districts*	38	97	97	89	84	79	71	74	68	63	61	58

* Excluding Greater London.

As with the neonatal rate, Greater London, while showing the least improvement over the eleven year span, continued to register the most favourable figures. The differences in the degree of improvement as between the county boroughs, the urban districts and the rural districts are negligible, but the rural districts continued to hold their very slight advantage.

Secular trend in infant mortality by certified cause.—Tables XVI and XVII and Table 12 (Part I) show the annual trends of infant mortality by certified cause for different years.

In Table XVII infant deaths from bronchitis and pneumonia and from enteritis and diarrhœa are separately distinguished from the remainder, and the annual rates for each group are shown in quinquennial periods from 1861 to 1945 and for each year from 1931. The group " enteritis and diarrhœa " is heterogenous, including deaths from epidemic diarrhœa, vomiting not otherwise specified, and diarrhœa arising from errors in feeding or diet. Both in 1948 and 1949 the mortality rate from enteritis and diarrhœa showed a definite improvement after failing to share in the general improvement for some years previously.

Table XVI records the annual infant mortality and neonatal rates for certain causes from 1940, and gives the average rate during the period 1936–39 for the purpose of comparison. Among the more important points that should be noted are the following :—

(*a*) Conditions occurring most frequently in the postnatal period (e.g. bronchitis and pneumonia, enteritis, meningitis, and specific infections such as whooping-cough and measles), have registered most of their improvement over pre-war years since the end of hostilities, and particularly in 1948 and 1949. During the war their rates showed little or no decline, and in some cases, e.g. bronchitis and pneumonia, temporarily increased.

(*b*) " Prematurity," except in 1941, steadily declined during the war and continued to decline, the post-war improvement being more pronounced.

(*c*) The slight increase in mortality due to asphyxia and atelectasis can be attributed to " premature " infant deaths being nowadays more frequently certified in terms of the actual pathological findings. This also explains in part why mortality from " birth injury " has remained

constant from year to year ; postmortem examination of early neonatal deaths often discloses intracranial hæmorrhage as the immediate cause, immature infants being particularly susceptible to head injury even during a normal spontaneous labour.

(*d*) The more rapid fall in the mortality ascribed to bronchitis as compared with pneumonia is possibly due to changes in certification practice, bronchopneumonia now being considered more descriptive of the actual pathology than bronchitis.

Infant Mortality and Stillbirths by Social Class

An analysis of infant mortality by social class among legitimate live births, based on the father's occupation, has been a feature of the Registrar General's Decennial Supplements since 1911. A description of the five social classes, as defined in 1949, and their composition in terms of particular occupations, is given in the Classification of Occupations, 1950*.

In 1911 and 1921 the tabulation was confined to births and infant deaths relating to the census year itself. For the 1931 analysis the infant deaths registered in the three years 1930 to 1932 were related to the live births registered in 1931, thus increasing the reliability of the published rates.

The coding of births and infant deaths by parent's occupation (including stillbirths for the first time) had already been started in 1939 in anticipation of a census in 1941. This made it possible to complete a social class analysis of the 1939 stillbirths and infant deaths, distinguishing neonatal and postnatal mortality, for the Royal Commission on Population, rates being worked only for England and Wales as a whole.

The portion of the 1951 Decennial Supplement on Occupational Mortality dealing with stillbirths and infant mortality is intended to cover the combined experience of the five years 1949 to 1953. The salient data for 1949 are included in this volume.

Table XXI shows, for each geographical region of England and Wales, the number of stillbirths and deaths under one year among legitimate births in each social class. Neonatal deaths are distinguished from postnatal deaths. The corresponding rates (based on legitimate births) are given to the first decimal place. In some of the regions the number of deaths, particularly those assigned to social class I, are relatively few. The rates based upon them are consequently subject to chance fluctuations, and it may be necessary to combine the experience of two or three years before firm conclusions can be drawn from some of the differences between the regions. 1949 was comparatively free from epidemics and spells of unseasonable weather, apart from a moderate influenza epidemic in the Spring. These events often have a circumscribed prevalence, and can upset the underlying long-term pattern of regional differences.

The Social Class distribution in previous years.—The analysis of infant deaths in 1930–32 by social class emphasized, *inter alia*, two important facts :

(1) Infant mortality progressively increased from Social Class I to Social Class V. There were 140 per cent. more infant deaths per thousand

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* H.M.S.O. price 30*s*. net (by post 30*s*. 11*d*.).

registered live births in Social Class V than in Social Class I, i.e., there was a social class gradient.

(2) This social class gradient, was evident in each of the geographical regions of England and Wales, but was greater in the North and Midlands than in the South, the East occupying an intermediate position. In the North, for example, the rate in Social Class V was 169 per cent. more than in Social Class I, whereas in the South East the corresponding excess was only 111 per cent.

In 1939 rates were not worked for the individual regions, but the figures for England and Wales as a whole demonstrated the continued presence of the social class gradient in infant mortality. The analysis of stillbirths by social class confirmed the existence of a gradient similar to that for the neonatal period. Despite the substantial improvement in infant mortality during the decade, the classes had maintained their relative positions one to the other, the relative decline in each being very similar.

Class V showed substantially less improvement in the neonatal rates than did the other classes, between which there was little difference in improvement. Class II had the largest percentage decline in the postnatal period. The rates for each social class in 1930–32 and in 1939, together with the percentage by which each rate had declined over the intervening period are as follows :—

	Period	I	II	III	IV	V
Neonatal	1930–32	21·7	27·2	29·4	31·9	32·5
	1939	18·9	23·4	25·4	27·7	30·1
	Percentage decline	13	14	14	13	7
Postnatal	1930–32	11·0	17·8	28·2	34·9	44·6
	1939	7·9	11·0	19·0	23·7	30·0
	Percentage decline	28	38	33	32	33

Factors operating since 1939 which might modify the Social Class gradient.— It is generally believed that the low mortality rates found among infants of Classes I and II are largely determined by their more favourable environmental circumstances. Among the more important of these in the past have been better maternal nutrition from infancy upwards, but especially during pregnancy ; more adequate antenatal care, particularly in the earlier months ; smaller families with fewer children of school age to bring back infection, and higher levels of education and social awareness regarding infant welfare.

Since 1939 two important factors, in particular, have led to a levelling up of nutritional standards : (1) The preferential and subsidized allocation of high quality foodstuffs to nursing mothers irrespective of social class, and (2) increased purchasing power among the less skilled workers due to full employment. Much has also been done in recent years to make antenatal supervision and skilled obstetric care during labour more universally available.

Table XXI.—Numbers of stillbirths, and deaths under one year (distinguishing neonatal from postnatal deaths) among legitimate births, together with corresponding rates by Social Class, in each of the Geographical Regions : England and Wales, 1949.

Geographical Region	Category	Numbers of legitimate stillbirths, and deaths under one year among the legitimate live births, in each social class					Category	Rates per 1,000 legitimate births : per 1,000 live and still births for stillbirths and per 1,000 live births for infant deaths				
		I	II	III	IV	V		I	II	III	IV	V
ENGLAND AND WALES	Stillbirths	409	1,844	8,887	2,605	2,079	Stillbirth	16·4	20·9	21·9	23·5	26·4
	Deaths :						Infant mortality :					
	0–4 weeks ..	296	1,458	7,330	2,196	1,723	0–4 weeks ..	12·1	16·9	18·4	20·3	22·4
	1–12 months ..	119	602	5,044	1,783	1,654	1–12 months ..	4·9	7·0	12·7	16·5	21·5
	Live births	24,559	86,483	397,510	108,270	76,789	0–12 months ..	16·9	23·8	31·1	36·8	44·0
SOUTH EAST	Stillbirths	197	612	2,645	548	506	Stillbirth	15·6	18·7	19·6	20·3	22·1
	Deaths :						Infant mortality :					
	0–4 weeks ..	148	502	2,164	434	424	0–4 weeks ..	11·9	15·6	16·4	16·4	18·9
	1–12 months ..	49	796	1,118	281	324	1–12 months ..	3·9	6·1	8·5	10·6	14·5
	Live births	12,430	32,127	132,060	26,401	22,429	0–12 months ..	15·9	21·7	24·9	27·1	33·4
Greater London	Stillbirths	120	329	1,477	251	290	Stillbirth	17·0	17·6	19·3	20·6	22·1
	Deaths :						Infant mortality :					
	0–4 weeks ..	83	263	1,220	196	259	0–4 weeks ..	11·9	14·4	16·3	16·4	20·2
	1–12 months ..	26	109	621	135	182	1–12 months ..	3·7	6·0	8·3	11·3	14·2
	Live births	6,957	18,320	74,883	11,934	12,835	0–12 months ..	15·7	20·3	24·6	27·7	34·4
Remainder of South East	Stillbirths	77	283	1,168	297	216	Stillbirth	13·9	20·1	20·0	20·1	22·0
	Deaths :						Infant mortality :					
	0–4 weeks ..	65	239	944	238	165	0–4 weeks ..	11·9	17·3	16·5	16·5	17·2
	1–12 months ..	23	87	497	146	142	1–12 months ..	4·2	6·3	8·7	10·1	14·8
	Live births	5,473	13,807	57,177	14,467	9,594	0–12 months ..	16·1	23·6	25·2	26·5	32·0
NORTH	Stillbirths	89	524	3,042	987	898	Stillbirth	16·9	21·7	23·6	24·9	28·4
	Deaths :						Infant mortality :					
	0–4 weeks ..	53	408	2,510	878	761	0–4 weeks ..	10·2	17·2	19·9	22·7	24·7
	1–12 months ..	34	197	2,131	829	854	1–12 months ..	6·6	8·3	16·9	21·5	27·8
	Live births	5,181	23,670	126,142	38,651	30,761	0–12 months ..	16·8	25·6	36·8	44·2	52·5
North I	Stillbirths	9	79	542	208	153	Stillbirth	11·8	23·1	24·2	22·7	27·7
	Deaths :						Infant mortality :					
	0–4 weeks ..	9	63	443	212	151	0–4 weeks ..	12·0	18·8	20·3	23·6	28·2
	1–12 months ..	4	31	420	231	156	1–12 months ..	5·3	9·3	19·2	25·8	29·1
	Live births	751	3,347	21,866	8,966	5,365	0–12 months ..	17·3	28·1	39·5	49·4	57·2
North II	Stillbirths	10	56	287	127	105	Stillbirth	17·0	17·1	23·9	27·7	26·7
	Deaths :						Infant mortality :					
	0–4 weeks ..	6	46	205	86	112	0–4 weeks ..	10·3	14·3	17·5	19·3	29·2
	1–12 months ..	3	26	187	97	129	1–12 months ..	5·2	8·1	16·0	21·8	33·6
	Live births	580	3,226	11,725	4,451	3,835	0–12 months ..	15·5	22·3	33·4	41·1	62·8

North III	Stillbirths	24	133	780	224	171	Stillbirth	17·4	22·6	22·2	21·8	
	Deaths:						Infant mortality:					
	0–4 weeks	14	105	700	215	133	0–4 weeks	10·3	18·2	20·3	21·2	23·7
	1–12 months	6	34	523	186	121	1–12 months	4·4	5·9	15·2	18·3	21·6
	Live births	1,359	5,765	34,434	10,147	5,604	0–12 months	14·7	24·1	35·5	39·5	45·3
North IV	Stillbirths	46	256	1,433	428	469	Stillbirth	18·1	22·1	24·1	27·6	28·6
	Deaths:						Infant mortality:					
	0–4 weeks	24	194	1,162	365	365	0–4 weeks	9·6	17·1	20·0	24·2	22·9
	1–12 months	21	106	1,001	315	448	1–12 months	8·4	9·4	17·2	20·9	28·1
	Live births	2,491	11,332	58,117	15,087	15,957	0–12 months	18·1	26·5	37·2	45·1	51·0
MIDLAND	Stillbirths	53	317	1,806	539	304	Stillbirth	16·1	20·9	21·9	22·5	25·6
	Deaths:						Infant mortality:					
	0–4 weeks	43	247	1,489	477	245	0–4 weeks	13·3	16·6	18·5	20·4	21·2
	1–12 months	13	100	1,093	365	246	1–12 months	4·0	6·7	13·6	15·6	21·2
	Live births	3,240	14,872	80,605	25,405	11,583	0–12 months	17·3	23·3	32·0	36·0	42·4
Midland I	Stillbirths	37	215	1,227	347	219	Stillbirth	16·4	21·0	22·1	22·6	26·3
	Deaths:						Infant mortality:					
	0–4 weeks	31	175	1,011	313	188	0–4 weeks	13·9	17·5	18·6	20·9	23·1
	1–12 months	9	64	739	225	157	1–12 months	4·0	6·4	13·6	15·0	19·3
	Live births	2,225	10,024	54,232	15,013	8,123	0–12 months	18·0	23·8	32·3	35·8	42·5
Midland II	Stillbirths	16	102	579	192	85	Stillbirth	15·5	20·6	21·5	22·4	24·0
	Deaths:						Infant mortality:					
	0–4 weeks	12	72	478	164	57	0–4 weeks	11·8	14·9	18·1	19·5	16·5
	1–12 months	4	36	354	140	89	1–12 months	3·9	7·4	13·4	16·7	25·7
	Live births	1,015	4,848	26,373	8,392	3,460	0–12 months	15·8	22·3	31·6	36·2	42·2
EAST	Stillbirths	16	108	350	188	87	Stillbirth	15·3	23·2	21·2	25·3	25·3
	Deaths:						Infant mortality:					
	0–4 weeks	10	82	282	130	79	0–4 weeks	10·7	18·1	17·5	17·9	23·6
	1–12 months	11	31	168	96	54	1–12 months	9·7	6·8	10·4	13·2	16·1
	Live births	1,028	4,339	16,164	7,253	3,349	0–12 months	20·4	24·9	27·8	31·2	39·7
SOUTH WEST	Stillbirths	24	131	403	125	104	Stillbirth	15·1	22·9	20·9	21·7	29·6
	Deaths:						Infant mortality:					
	0–4 weeks	25	103	339	120	86	0–4 weeks	16·0	18·4	17·9	21·3	25·2
	1–12 months	5	26	163	65	54	1–12 months	3·2	4·7	8·6	11·6	15·8
	Live births	1,562	5,597	18,924	5,629	3,411	0–12 months	19·2	23·1	26·5	32·9	41·0
WALES	Stillbirths	30	152	641	218	180	Stillbirth	26·1	26·1	26·4	30·5	33·1
	Deaths:						Infant mortality:					
	0–4 weeks	16	116	546	157	128	0–4 weeks	14·3	20·4	23·1	22·7	24·4
	1–12 months	8	52	371	147	122	1–12 months	7·2	9·2	15·7	21·2	23·2
	Live births	1,118	5,678	23,615	6,931	5,256	0–12 months	21·5	29·6	38·8	43·9	47·6
Wales I	Stillbirths	16	84	500	158	137	Stillbirth	21·5	25·1	26·4	31·9	38·9
	Deaths:						Infant mortality:					
	0–4 weeks	10	67	418	112	101	0–4 weeks	13·7	20·5	22·6	23·4	25·9
	1–12 months	5	29	292	114	89	1–12 months	6·9	8·9	15·8	23·8	22·8
	Live births	729	3,267	18,465	4,797	3,902	0–12 months	20·6	29·4	38·5	47·1	48·7
Wales II	Stillbirths	14	68	141	60	43	Stillbirth	34·7	27·4	26·7	27·4	30·8
	Deaths:						Infant mortality:					
	0–4 weeks	6	49	128	45	27	0–4 weeks	15·4	20·3	24·9	21·1	19·9
	1–12 months	3	23	79	33	33	1–12 months	7·7	9·5	15·3	15·5	24·4
	Live births	389	2,411	5,150	2,134	1,354	0–12 months	23·1	29·9	40·2	36·6	44·3

The Social Class distribution in 1949.—A preliminary analysis of the crude stillbirth and infant mortality rates in 1949 by social class, uncorrected for age and parity of mother, brings no evidence that the gap between Classes I and V has narrowed. The lack of change in this respect was foreshadowed by the similar analyses which the Registrar General for Scotland has published annually since 1943.

The following table compares 1939 with 1949 in regard to the proportionate distribution of the infant mortality rate between the social classes. The distribution of births as between the social classes has changed over the decade; in 1949 there were, relatively, more births in social classes I and II and fewer in IV and V than ten years earlier. By taking the arithmetic mean of the five social class rates as 100 rather than the overall rate for all classes, the proportionate distributions can be compared uninfluenced by the differential "weightings" which the varying numbers in each social class contributed in 1939 and 1949, respectively.

The social class gradient in mortality is just as evident, and on balance more so, particularly in the postnatal period.

Period		Unweighted Average Rate (I—V)	Per cent. of Unweighted Average Rate				
			I	II	III	IV	V
Stillbirth	1939	34·1	72	98	104	110	116
	1949	21·8	75	96	100	108	121
Neonatal	1939	25·1	75	93	101	110	120
	1949	18·0	67	94	102	113	124
Postnatal	1939	18·3	43	60	104	130	164
	1949	12·5	39	56	102	132	172

When the percentage decline since 1939 is calculated for each social class the following picture emerges :—

Period		I	II	III	IV	V
Stillbirth	1939	24·4	33·4	35·6	37·6	39·7
	1949	16·4	20·9	21·9	23·5	26·4
	Percentage decline	33	37	38	37	34
Neonatal	1939	18·9	23·4	25·4	27·7	30·1
	1949	12·1	16·9	18·4	20·3	22·4
	Percentage decline	36	28	28	27	26
Postnatal	1939	7·9	11·0	19·0	23·7	30·0
	1949	4·9	7·0	12·7	16·5	21·5
	Percentage decline	38	36	33	30	28

In the postnatal period it is obvious that the improvement has been greatest for Social Class I, and has been progressively less for the remainder.

Stillbirth and neonatal rates show a less well-defined picture. With the former, improvement has been less in Classes I and V, the others registering similar gains. In the case of neonatal mortality, progress in Class I has been more substantial than in the other four, the differences between which, though numerically favouring II and III in that order, cannot be regarded as significant.

MORTALITY AT AGES OVER ONE YEAR

Table XXII gives death rates at various ages per million living for 1936–39 and for single years from 1940 to 1949, non-civilians being excluded both from populations and deaths as indicated. Table XXIII compares the death rates for 1946, 1947, 1948 and 1949 with those for earlier periods.

able XXII.—Mortality from All Causes per million population, 1936–39 and each year 1940 to 1949.

Age (l.b.d.)	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
	MALES (Civilians from 3rd September, 1939)										
l Ages											
Crude ..	12,885	16,127	15,692	14,408	15,282	15,252	14,955	13,400	13,550	11,864	12,631
C.M.I. ..	1·038	1·187	1·096	0·967	0·978	0·952	0·920	0·889	0·921	0·815	0·863
Ages under 65											
E.A.R. ..	8,468	10,016	9,489	8,187	8,357	8,227	7,805	7,193	7,217	6,437	6,519
–	17,457	17,525	18,244	15,648	15,584	14,784	13,699	13,417	13,547	9,717	8,656
–	1,924	2,119	2,250	1,681	1,610	1,575	1,354	971	1,039	876	799
–	1,220	1,479	1,497	1,162	1,095	1,181	1,030	858	782	640	630
–	2,012	2,763	2,938	2,123	2,115	1,952	1,794	1,524	1,620	1,298	1,268
–	2,769	4,801	5,566	4,753	5,045	4,789	4,749	2,659	2,053	1,539	1,591
–	2,882	4,084	4,643	3,854	4,038	4,287	3,838	2,241	2,121	1,866	1,755
–	4,727	5,838	5,637	4,673	4,762	4,749	4,196	3,545	3,436	3,146	3,121
–	10,615	12,503	11,026	9,576	9,952	9,617	9,104	8,941	8,983	8,242	8,387
–	24,124	28,335	25,123	22,432	22,844	22,685	22,279	22,312	22,850	21,551	22,638
–	55,602	61,274	55,209	51,171	51,413	50,614	50,325	49,723	52,537	48,956	53,190
–	136,229	151,846	134,598	120,661	122,596	116,457	115,696	117,444	125,863	108,561	120,721
and over ..	281,766	303,200	258,762	232,867	234,137	211,964	204,717	232,328	266,526	210,210	248,954
	FEMALES (Civilians from 1st June, 1941)										
l Ages											
Crude ..	11,315	12,864	11,810	10,660	11,260	10,842	10,846	10,901	11,268	10,142	11,103
C.M.I. ..	1·054	1·156	1·043	0·916	0·944	0·894	0·875	0·875	0·892	0·789	0·851
Ages under 65											
E.A.R. ..	6,179	6,731	6,250	5,413	5,455	5,232	4,962	4,807	4,765	4,231	4,219
–	13,758	13,635	14,547	12,274	12,432	11,701	10,787	10,336	10,576	7,637	6,707
–	1,683	1,803	1,862	1,313	1,184	1,173	1,008	745	753	624	571
–	1,083	1,310	1,240	915	975	918	789	665	611	552	492
–	1,752	2,323	2,277	1,727	1,687	1,547	1,380	1,169	1,211	1,120	957
–	2,395	2,865	2,809	2,408	2,359	2,356	2,092	1,782	1,820	1,555	1,429
–	2,609	2,940	2,852	2,407	2,445	2,443	2,134	1,990	1,938	1,772	1,654
–	3,751	4,135	3,765	3,220	3,321	3,114	2,923	2,789	2,741	2,449	2,482
–	7,320	8,044	7,256	6,368	6,435	6,189	5,921	5,822	5,722	5,333	5,385
–	16,151	17,663	15,382	13,871	13,940	13,414	13,250	13,299	13,083	12,204	12,825
–	40,961	44,998	39,484	35,354	36,434	34,591	34,595	34,640	35,217	32,089	35,454
–	104,634	116,409	101,843	91,022	95,948	89,750	90,161	92,383	96,588	84,542	95,759
and over ..	248,557	267,460	241,708	209,179	213,457	188,842	189,541	206,154	219,792	183,533	217,543
	PERSONS (Non-civilians excluded as above)										
ll Ages											
Crude ..	12,068	14,356	13,536	12,307	12,997	12,731	12,613	12,047	12,339	10,962	11,832
C.M.I. ..	1·045	1·171	1·070	0·942	0·957	0·918	0·893	0·881	0·906	0·801	0·856
–	15,642	15,619	16,432	13,997	14,041	13,276	12,276	11,914	12,099	8,703	7,707
–	1,805	1,963	2,059	1,500	1,401	1,377	1,184	860	899	753	687
–	1,152	1,395	1,370	1,039	1,036	1,051	911	763	698	596	562
–	1,882	2,535	2,589	1,913	1,879	1,726	1,563	1,328	1,389	1,200	1,097
–	2,578	3,499	3,551	3,021	3,016	2,958	2,733	2,070	1,916	1,547	1,507
–	2,742	3,443	3,532	2,925	2,970	3,012	2,666	2,102	2,026	1,818	1,704
–	4,208	4,922	4,624	3,868	3,948	3,816	3,475	3,152	3,081	2,792	2,797
–	8,837	10,070	8,973	7,823	8,019	7,729	7,364	7,254	7,237	6,699	6,805
–	19,850	22,559	19,828	17,762	17,963	17,584	17,307	17,362	17,180	16,409	17,227
–	47,514	52,269	46,503	42,402	43,090	41,682	41,513	41,272	42,776	39,408	43,100
–	116,944	130,130	114,345	102,565	106,394	100,289	100,269	102,399	108,255	94,139	105.732
and over ..	259,188	278,717	247,176	216,793	220,218	196,459	194,544	214,541	234,429	191,929	227,502

Table XXIII.—Mortality at Various Ages from All Causes in 1946, 1947, 1948, and 1949 per cent. of that for the same sex and age in 1936–39, and from All Causes in 1948 and 1949 per cent. of that for the same sex and age in 1921–30 and 1931–35.

Age (l.b.d.)	Per cent. of 1936–39				Per cent. of 1921–30		Per cent. of 1931–35	
	1946	1947	1948	1949	1948	1949	1948	1949
	MALES							
All ages, Crude ..	104	105	92	98	92	98	93	99
Ages under 65 E.A.R.	85	85	76	77	65	66	72	73
0–	77	78	56	50	39	34	48	43
5–	50	54	46	42	35	32	38	35
10–	70	64	52	52	39	38	45	44
15–	76	81	65	63	50	48	53	52
20–	96	74	56	57	45	47	49	50
25–	78	74	65	61	48	46	56	53
35–	75	73	67	66	50	49	58	58
45–	84	85	78	79	71	72	74	75
55–	92	95	89	94	88	92	92	96
65–	89	94	88	96	84	91	86	94
75–	86	92	80	89	80	89	80	89
85 and over	82	95	75	88	74	87	75	89
	FEMALES							
All ages, Crude ..	96	100	90	98	89	97	89	98
Ages under 65 E.A.R.	78	77	68	68	55	55	62	62
0–	75	77	56	49	38	33	48	42
5–	44	45	37	34	27	25	30	28
10–	61	56	51	45	34	30	40	36
15–	67	69	64	55	45	39	50	43
20–	74	76	65	60	51	47	56	52
25–	76	74	68	63	51	48	57	54
35–	74	73	65	66	50	51	57	57
45–	80	78	73	74	62	63	67	68
55–	82	81	76	79	67	70	72	76
65–	85	86	78	87	71	79	75	83
75–	88	92	81	92	76	86	78	88
85 and over	83	88	74	88	74	88	75	89

During 1946 and to a less extent in 1947 the death rates of young adult civilians of each sex were still affected selectively by the withdrawal from the civilian population to the armed forces of many of those who, after medical examination, were considered fit for military service. By 1948 and 1949, however, the only perceptible evidence of this influence still remaining was a slight inflation of the death rates of males aged 15–19, the age group containing those who were liable for compulsory service in the forces.

Young Children (Ages 1–4)

Table XXIV gives annual death rates of children aged 1, 2, 3 and 4 years from 1943 to 1949, in comparison with earlier periods. At age 1, there was a 71 per cent. decline in mortality in each sex in 1949 compared with 1936–39 and at age 2 a decline of 67 per cent. for boys and 66 per cent. for girls. The death rate of boys aged 3 increased slightly in 1949 compared with 1948, from 1·23, to 1·42 per thousand, the latter rate representing a decline of 56 per cent. compared with 1936–39. The corresponding reduction for girls was 63 per cent. At age 4 the death rates of boys declined by 61 per cent. and of girls by 68 per cent. between 1936–39 and 1949.

Table XXIV.—Mortality per 1,000 living from All Causes, including and excluding Operations of War at ages 1–4, 1921–30, 1931–40, 1931–35, 1936–39 and each year 1943 to 1949. Rates per cent. of 1936–39.

Age (l.b.d.)	1921–30	1931–40	1943	1944	1945	1946	1947	1948	1949
	All Causes. Both Sexes (*Death rate per* 1,000 *living*)								
1	19·70	10·89	5·80	4·57	4·20	3·49	4·04	2·77	2·54
2	8·44	5·05	3·12	2·56	2·40	1·85	2·02	1·71	1·40
3	5·18	3·63	2·40	2·15	2·00	1·51	1·43	1·19	1·24
4	3·88	3·03	2·02	1·81	1·65	1·33	1·17	1·03	0·94
1–4 Crude ..	9·40	5·65	3·34	2·84	2·64	2·08	2·17	1·75	1·56
E.A.R.	9·30	5·65	3·34	2·77	2·56	2·05	2·16	1·68	1·53
		1931–35	1936–39	1943	1944	1945	1946	1947	1948	1949
		All Causes (*Except Operations of War in* 1943–45)								
		Males (*Death rates per* 1,000 *living*)								
1		13·89	9·32	5·94	4·60	4·39	3·67	4·34	2·89	2·71
2		6·09	4·34	3·27	2·69	2·48	1·98	2·21	1·87	1·45
3		4·22	3·22	2·56	2·20	2·09	1·69	1·63	1·23	1·42
4		3·45	2·81	1·97	1·85	1·84	1·55	1·30	1·17	1·09
1–4 Crude ..		6·87	4·96	3·45	2·90	2·78	2·26	2·38	1·87	1·69
E.A.R.		6·91	4·92	3·44	2·84	2·70	2·22	2·37	1·79	1·67
		Females (*Death rates per* 1,000 *living*)								
1		12·27	8·10	5·57	4·20	3·90	3·29	3·72	2·64	2·36
2		5·58	3·95	2·88	2·19	2·23	1·73	1·81	1·55	1·36
3		3·98	2·88	2·12	1·83	1·82	1·33	1·22	1·15	1·06
4		3·25	2·50	1·94	1·50	1·36	1·10	1·03	0·89	0·79
1–4 Crude ..		6·23	4·38	3·13	2·49	2·40	1·90	1·96	1·63	1·43
E.A.R.		6·27	4·36	3·13	2·43	2·33	1·86	1·95	1·56	1·39
		Males (*Per cent. of rate* 1936–39)								
1		149	100	64	49	47	39	47	31	29
2		140	100	75	62	57	46	51	43	33
3		131	100	80	68	65	52	51	38	44
4		123	100	70	66	65	55	46	42	39
		Females (*Per cent. of rate* 1936–1939)								
1		151	100	69	52	48	41	46	33	29
2		141	100	73	55	56	44	46	39	34
3		138	100	74	64	63	46	42	40	37
4		130	100	78	60	54	44	41	36	32

For the whole group aged 1–4 the equivalent average death rate of boys declined from 4·92 per thousand in 1936–39 to 1·67 in 1949, or by 66 per cent. Almost the same degree of improvement occurred among girls, and the death rate declined from 4·36 to 1·39 or by 68 per cent. For every three children who died annually during the period 1936–39, only one child died in 1949.

Table XXV.—Mortality in Early Childhood : distribution at ages 1 and 2–4 in Geographical Regions and different classes of area in 1946 to 1949. Rates in 1948 and 1949 per cent. of 1936–39 and of National Rate.

Area	Age 1 (second year of life)							
	Rates per 1,000 living (both sexes)				Mortality per cent. of 1936–39		Mortality per cent. of National Rate	
	1946	1947	1948	1949	1948	1949	1948	1949
England and Wales	**3·49**	**4·04**	**2·77**	**2·54**	**32**	**29**	**100**	**100**
South East	2·84	3·22	2·14	1·89	30	27	77	74
Greater London	2·77	3·11	2·26	1·60	29	21	82	63
Remainder of South East	2·93	3·35	1·98	2·26	33	37	71	89
North	4·14	4·91	3·27	3·19	30	29	118	126
North I	5·06	5·40	3·53	3·02	31	26	127	119
North II	3·24	4·14	3·37	3·96	29	35	122	156
North III	4·04	3·99	3·06	2·94	32	30	110	116
North IV	4·05	5·44	3·27	3·24	29	29	118	128
Midland	3·38	4·17	2·88	2·61	33	30	104	103
Midland I	3·32	4·17	2·96	2·63	33	29	107	104
Midland II	3·52	4·17	2·70	2·57	34	32	97	101
East	3·43	3·05	3·18	2·47	48	37	115	97
South West	3·00	3·77	2·13	2·27	33	36	77	89
Wales	4·38	4·64	3·65	2·87	39	31	132	113
Wales I	4·54	4·48	3·68	2·88	37	29	133	113
Wales II	3·96	5·09	3·60	2·85	46	36	130	112
Density Summary :								
County boroughs (excluding Greater London)	4·10	5·06	3·16	3·21	30	30	114	126
Other urban districts (excluding Greater London)	3·36	3·89	2·74	2·39	33	29	99	94
Rural districts (excluding Greater London)	3·38	3·52	2·70	2·66	38	38	97	105
Greater London								
Administrative County	3·49	3·73	2·76	1·84	30	20	100	72
Outer Ring	2·34	2·73	1·92	1·44	30	22	69	57
	Ages 2–4 (third, fourth and fifth years of life)							
England and Wales	**1·58**	**1·54**	**1·31**	**1·22**	**40**	**37**	**100**	**100**
South East	1·30	1·28	1·02	0·99	40	39	78	81
Greater London	1·31	1·19	0·96	0·93	36	35	73	76
Remainder of South East	1·29	1·40	1·10	1·06	47	45	84	87
North	1·83	1·85	1·52	1·46	36	35	116	120
North I	2·14	1·85	1·75	1·43	39	32	134	117
North II	1·96	1·74	1·56	1·41	38	35	119	116
North III	1·50	1·86	1·42	1·48	37	38	108	121
North IV	1·87	1·88	1·50	1·47	34	34	115	120
Midland	1·56	1·55	1·48	1·28	46	40	113	105
Midland I	1·58	1·63	1·50	1·34	47	42	115	110
Midland II	1·51	1·38	1·44	1·18	46	37	110	97
East	1·41	1·16	1·37	1·10	57	45	105	90
South West	1·58	1·39	1·09	1·11	45	45	83	91
Wales	1·99	1·77	1·48	1·22	39	32	113	100
Wales I	1·94	1·81	1·59	1·36	42	36	121	111
Wales II	2·13	1·66	1·21	0·86	32	23	92	70
Density Summary :								
County boroughs (excluding Greater London)	1·69	1·72	1·42	1·40	36	36	108	115
Other urban districts (excluding Greater London)	1·59	1·61	1·36	1·18	40	35	104	97
Rural districts (excluding Greater London)	1·65	1·49	1·41	1·26	52	47	108	103
Greater London								
Administrative County	1·60	1·28	1·06	1·00	35	33	81	82
Outer Ring	1·13	1·13	0·90	0·89	37	37	69	73

The regional death rates at age 1 and at ages 2–4 are shown in Table XXV for each year 1946 to 1949, with rates for 1948 and 1949 expressed per cent. of the mean annual rates in 1936–39 and per cent. of the rate for England and Wales in 1948 and 1949.

Table XXVI.—Death rates from Various Infective Diseases per Million Living at Ages 1–4 Years in 1911–20 and each year 1921 to 1949.

Year	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Cerebro-Spinal (Meningococcal) Meningitis	Tuberculosis		Bronchitis and Pneumonia	Enteritis and Diarrhœa
							Meninges and Central Nervous System	Others		
1911–20	2,279	253	1,091	811	581	55	696	809	4,441	1,212
1921	570	173	790	760	186	37	486	509	3,454	1,015
1922	1,447	201	1,702	706	606	40	537	507	4,662	413
1923	1,260	148	690	453	111	23	490	474	2,822	491
1924	1,093	131	663	428	363	26	479	470	3,520	435
1925	1,254	151	1,026	462	151	33	473	444	3,169	478
1926	802	92	694	463	132	34	439	400	2,909	515
1927	899	79	688	438	462	53	462	399	3,489	367
1928	1,061	81	530	492	95	41	390	361	2,351	377
1929	913	89	1,307	521	489	64	419	371	4,117	429
1930	1,080	102	371	539	49	62	386	312	1,873	283
1931	873	76	500	417	221	141	396	270	2,599	278
1932	935	81	557	378	146	120	394	286	2,016	273
1933	540	113	457	385	280	104	367	228	2,075	308
1934	1,057	145	413	593	57	74	350	215	1,840	218
1935	371	82	284	519	74	67	303	170	1,435	205
1936	753	72	382	453	76	70	285	180	1,501	182
1937	277	57	340	455	170	83	284	194	1,592	195
1938	424	58	218	412	60	68	282	168	1,305	181
1939	68	30	212	339	70	53	269	137	880	150
1940	208	19	128	398	130	248	276	160	1,356	162
1941	273	25	475	482	64	221	384	239	1,188	160
1942	111	12	133	303	47	131	302	164	719	113
1943	176	19	201	211	84	79	285	178	744	101
1944	56	14	144	140	40	67	259	153	545	109
1945	156	11	104	96	39	48	254	158	503	102
1946	35	3	109	66	43	53	209	125	410	69
1947	122	5	120	33	27	52	208	133	429	88
1948	55	1	88	21	14	33	180	95	321	58
1949	53	1	52	14	24	30	146	57	286	55

At age 1, reduction in mortality between 1936–39 and 1949 was greatest in Greater London ; the death rate in that area was 82 per cent. of the national average in 1948 but only 63 per cent. in 1949.

At ages 2–4 reduction in mortality between 1936–39 and 1949 was greatest in Wales II and the death rate there in 1949 was 70 per cent. of the average for England and Wales.

Death rates from a number of important infectious diseases from 1911 to 1949 are shown in Table XXVI. Mortality from measles was 55 per million in 1948 and 53 per million in 1949. With the exception of 1946 these were the lowest death rates from measles that have been recorded. With the single exception of cerebro-spinal meningitis the death rates in 1948 and 1949 from each of the other diseases shown in the table were the lowest yet recorded and were in striking contrast with the average rates for 1911–20. The death rates in 1949 per cent. of 1911–20 for each disease were as follows :—

Measles	2·3 per cent.
Scarlet fever	0·4 per cent.
Whooping cough	4·8 per cent.
Diphtheria	1·7 per cent.
Influenza	4·1 per cent.
Cerebro-spinal meningitis	54·5 per cent.
Tuberculosis of the meninges ..	21·0 per cent.
Other tuberculosis	7·0 per cent.
Bronchitis and pneumonia	6·4 per cent.
Enteritis and diarrhœa	4·5 per cent.

Table XXVII.—Deaths from Various Causes per million living at Ages 1–4 years in 1936–39, and each year 1941 to 1949 (both sexes).

International List No.	Cause of death	1936–39*	1941	1942	1943	1944	1945	1946	1947	1948	1949
	Tuberculosis :										
13	Respiratory system.. ..	49	77	59	61	61	59	53	61	42	28
14	Meninges and central nervous system	280	384	302	285	259	254	209	208	180	146
15	Intestines and peritoneum..	50	62	44	45	37	36	23	21	18	10
16–22	Other tuberculous diseases..	71	100	60	72	55	62	49	51	35	18
45–55	Cancer and other malignant tumours	43	51	47	45	46	50	46	62	53	63
58	Rheumatic fever	12	10	8	7	8	11	7	6	9	4
70	Rickets	14	10	6	3	3	4	2	0	0	—
81	Meningitis (non-meningococcal)	80	75	55	55	49	38	34	35	25	23
85	Epilepsy	21	34	26	23	23	26	17	23	20	17
86	Convulsions	54	42	33	31	25	22	15	15	13	8
89	Diseases of ear and mastoid antrum	65	35	31	38	35	28	17	19	18	12
90–95	Heart diseases	22	13	14	11	12	9	8	5	7	9
105	Diseases of larynx	22	23	17	24	17	18	12	12	15	14
115(*b*) (*c*)	Diseases of tonsils, pharynx, etc.	59	37	45	38	26	23	19	14	15	10
118 : 1	Inflammation of stomach ..	10	14	9	7	7	4	5	3	2	1
121	Appendicitis	68	48	39	38	48	41	40	38	34	32
122	Hernia, intestinal obstruction	37	44	32	29	32	27	23	20	18	18
130	Acute nephritis	21	24	20	20	18	17	15	9	7	8
157	Congenital malformations ..	102	133	122	123	126	117	118	120	118	109
181	Accidental burns	165	156	144	126	112	98	66	58	55	50
183	Accidental drowning	52	74	82	78	79	81	70	54	53	54
197	Operations of war	—	316	61	47	137	45	—	—	—	—
	Other violence	216	288	260	225	236	253	219	185	199	175
	Other causes	3,160	3,247	1,903	1,910	1,387	1,319	1,015	1,156	812	753
	All Causes	**4,674**	**5,296**	**3,424**	**3,342**	**2,839**	**2,642**	**2,082**	**2,175**	**1,751**	**1,563**

* Rates for 1936–39 are corrected to the 1940 classification.

Table XXVII gives death rates in 1936–39 and each year from 1941 to 1949 from tuberculosis of various sites and from a number of other causes. In the residual group of " other causes " in this table, with death rates of 812 per million in 1948 and 753 per million in 1949, the various infectious diseases other than tuberculosis included in the previous table together accounted for 591 and 515 deaths per million in 1948 and 1949 respectively.

Each of the forms of tuberculosis listed in the table showed large reductions in mortality in 1948 and 1949 compared with previous years. The death rate from respiratory tuberculosis was 49 per million in 1936-39 and 28 per million in 1949. Tuberculosis of the meninges and nervous system, the principal form of fatal tuberculosis in young children, gave a rate of 280 per million in 1936–39 but only half of this, 146 per million, in 1949. Improvement in mortality from tuberculosis of the intestines and peritoneum was, relatively, even greater. Mortality declined from 50 per million in 1936–39 to 10 per million in 1949.

Mortality from rheumatic fever increased slightly in 1948, but this increase was followed by a substantial reduction in 1949 to 4 per million, the lowest rate yet recorded. Death rates from heart disease on the other hand, 7 in 1948 and 9 in 1949 were higher than in 1947 (5), but much lower than in 1936–39 (22 per million).

No deaths were attributed to rickets in 1949. The death rates from convulsions continued to diminish rapidly but progress was slower in regard to deaths specifically attributed to epilepsy. Rates in 1949 were the lowest yet recorded from diseases of ear and mastoid, from diseases of tonsil, pharynx, etc., from inflammation of stomach and from appendicitis. The incidence of fatal burns per million, 55 in 1948 and 50 in 1949 was one-third that of 1936–39. Deaths from accidental drowning, though much fewer than during 1941–46, remained slightly in excess of 1936–39.

Grouping the causes in Table XXVI with XXVII somewhat differently, death rates in 1936–39, 1948, and 1949 are compared in the table below :—

Cause of death	Rates per million				Per cent. of 1936–39	
	1936–39	1947	1948	1949	1948	1949
Measles, whooping cough, scarlet fever, diphtheria	1,137	280	165	119	15	10
Bronchitis, pneumonia, influenza	1,413	456	334	310	24	22
Diseases of throat, larynx, ear, mastoid	146	45	48	37	33	25
Enteritis, appendicitis	245	126	91	87	37	36
Meningitis, all forms	428	295	239	199	56	46
Tuberculosis (except meningitis)	170	133	95	57	56	34
Other non-violent causes	702	543	470	476	67	68
Violent causes	433	297	308	279	71	64
All causes	**4,674**	**2,175**	**1,751**	**1,563**	**37**	**33**

Mortality from the group of common infectious diseases in 1949 was only a tenth that of 1936–39 ; and from the various respiratory throat and ear infections about one-fourth that of 1936–39. Deaths from enteritis and appendicitis and from tuberculosis declined by two-thirds and from meningitis by more than a half. Improvement in respect of deaths from all other diseases, considered as a group, and from violence, was less: the rates in 1949 being approximately one-third less than in 1936–39. Deaths from violence in 1949 numbered 828 or 18 per cent. of all deaths at these ages. 516 were deaths of boys (20 per cent. of deaths from all causes) and 312 were deaths of girls (15 per cent. of deaths from all causes). The principal violent causes of death in each sex, with percentage distribution, were :—

	Male.		*Female.*	
	No.	*Per cent.*	*No.*	*Per cent.*
All violent causes	516	*100*	312	*100*
Motor vehicle and other road transport accidents	199	*38*	103	*33*
Accidental burns	66	*13*	82	*26*
Accidental drowning	122	*24*	37	*12*
All other violent causes	129	*25*	90	*29*

Children of School Age (Ages 5–14)

Death rates at ages 5–9 and 10–14 in 1936–39 and in each year from 1943 to 1949 are given in Table XXVIII from all causes and from nine separate causes.

Table XXVIII.—Death rates at Ages 5–9 and 10–14 per million living from Various Causes, 1936–39, and each year 1943 to 1949.

Sex and Cause of death	1936–39	1943	1944	1945	1946	1947	1948	1949
Ages 5–9								
MALES								
Diphtheria	411	171	120	87	40	29	16	7
Tuberculosis	170	171	160	157	130	131	96	75
Meningitis (except tuberculous)	58	57	39	30	25	20	16	16
Pneumonia	150	78	66	61	41	43	40	30
Rheumatic fever and endocarditis	77	49	67	55	33	32	37	28
Diseases of ear and mastoid antrum	57	31	30	10	12	10	7	3
Appendicitis	85	48	67	62	53	47	29	24
Violence (except War Operations)	361	481	494	498	328	381	318	299
All Causes (except War Operations)	**1,924**	**1,553**	**1,439**	**1,313**	**971**	**1,039**	**876**	**799**
Operations of War	—	58	136	42	—	—	—	—
FEMALES								
Diphtheria	450	164	122	95	50	28	23	5
Tuberculosis	155	158	152	163	149	128	93	64
Meningitis (except tuberculous)	51	43	33	24	21	20	10	14
Pneumonia	133	66	48	43	41	38	24	25
Rheumatic fever and endocarditis	88	61	60	59	36	37	43	36
Diseases of ear and mastoid antrum	47	28	22	13	14	11	8	7
Appendicitis	61	42	42	43	31	37	22	19
Violence (except War Operations)	172	180	224	209	149	162	153	128
All Causes (except War Operations)	**1,683**	**1,135**	**1,055**	**966**	**745**	**753**	**624**	**571**
Operations of War	—	49	118	42	1	—	—	—
Ages 10–14								
MALES								
Diphtheria	99	52	41	28	15	9	6	1
Tuberculosis	139	119	125	138	122	107	62	52
Meningitis (except tuberculous)	29	20	25	13	11	13	6	8
Pneumonia	66	43	44	33	28	26	18	16
Rheumatic fever and endocarditis	114	72	78	80	66	58	64	50
Diseases of ear and mastoid antrum	33	22	14	17	14	11	7	8
Appendicitis	76	56	71	47	40	34	24	26
Violence (except War Operations)	234	265	279	302	247	228	178	194
All Causes (except War Operations)	**1,220**	**1,017**	**1,006**	**970**	**854**	**782**	**639**	**630**
Operations of War	—	79	175	60	4	—	1	—
FEMALES								
Diphtheria	105	50	33	25	10	7	4	4
Tuberculosis	193	175	167	180	159	146	121	73
Meningitis (except tuberculous)	27	25	19	15	14	12	7	6
Pneumonia	62	50	46	32	27	30	18	25
Rheumatic fever and endocarditis	151	112	104	92	67	56	88	71
Diseases of ear and mastoid antrum	31	22	20	15	13	13	5	7
Appendicitis	45	36	38	34	31	27	22	21
Violence (except War Operations)	77	99	89	94	70	63	63	63
All Causes (except War Operations)	**1,083**	**901**	**793**	**754**	**665**	**611**	**552**	**492**
Operations of War	—	74	125	34	—	—	—	—

At **ages 5–9** the rates for all causes, excluding operations of war, resumed the downward trend that had been slightly interrupted in 1947. Taking the rates in 1936–39 as 100, mortality each year from 1940 to 1949 was as follows :—

	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Male	100	96	103	84	81	75	68	50	54	46	42
Female	100	92	95	75	67	63	57	44	45	37	34

In 1936–39 the leading cause of death at ages 5–9 was diphtheria, accounting for 21 per cent. of the deaths of boys and 27 per cent. of the deaths of girls. By 1949, however, mortality from diphtheria had so declined that it caused less than 1 per cent. of the total of deaths in each sex. By contrast deaths from violent causes increased in relative importance, causing 37 per cent. of the deaths of boys and 22 per cent. of the deaths of girls in 1949.

Death rates in 1949 expressed as percentages of 1936–39 at ages 5–9 and 10–14 from selected causes were as follows :—

	Ages 5–9		**Ages 10–14**	
	Male	*Female*	*Male*	*Female*
Diphtheria	1·7	1·1	1·0	3·8
Tuberculosis	44	41	37	38
Meningitis (except tuberculous)	28	27	28	22
Pneumonia	20	19	24	40
Rheumatic fever and endocarditis	36	41	44	47
Diseases of ear and mastoid antrum	5·3	15	24	23
Appendicitis	28	31	34	47
Violence, excluding war operations	83	74	83	82

At ages 5–9 mortality from tuberculosis, rheumatic fever and rheumatic heart disease in 1949 was less than half that averaged in 1936–39 and still greater improvement was recorded for each of the other causes listed, with the exception of violence.

At **ages 10–14** mortality continued to improve during 1948 and 1949. Annual death rates from all causes, except operations of war, expressed as a percentage of the average rates in 1936–39 were :—

	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Male	100	96	99	88	83	82	80	70	64	52	52
Female	100	94	90	80	83	73	70	61	56	51	45

Violence continued to be the chief cause of death among boys, and gave rise to 31 per cent. of all deaths at these ages in 1949, a proportion 19 per cent. in excess of that of 1936–39. Tuberculosis, rheumatic fever and rheumatic heart disease came next in importance among boys and each preceded violence among the causes of death of girls.

In each sex there were notable reductions in deaths from all the causes listed in Table XXVIII except violence, with death rates usually well under half those recorded in 1936–39.

Table XXIX shows death rates at ages 5–14 in geographical areas and density aggregates in 1936–39 and each year 1946 to 1949. Comparing 1949 with the period 1936–39 improvement was greatest in the North I, II and IV regions, least in the South West. The North III region had the highest rate in 1949, 13 per cent. above the national average, followed by Wales I, South West, and Midland II.

The gradient of increasing mortality with urbanisation, clearly seen in 1936–39 with high rates in the county boroughs and low rates in the rural districts, had practically disappeared by 1947, and during 1948 and 1949 mortality in the towns continued to decline more rapidly than in the country.

Table XXIX.—Mortality per 100,000 living at Ages 5–14 years in Geographical Regions and different classes of area, 1936–1939 and each year 1946 to 1949. Rates in 1948 and 1949 per cent. of those in 1936–39 and of National Rate.

Area	Rates per 100,000 living (both sexes)					1948 per cent. of		1949 per cent. of	
	1936–39	1946	1947	1948	1949	1936–39	National Rate	1936–39	National Rate
England and Wales	**147**	**81**	**79**	**68**	**63**	**46**	**100**	**43**	**100**
Greater London	121	73	70	65	56	54	96	46	89
Remainder of South East ..	122	66	72	59	56	48	87	46	89
North I	193	102	103	80	63	41	118	33	100
North II	168	92	89	74	58	44	109	35	92
North III	154	76	80	68	71	44	100	46	113
North IV	181	94	84	73	65	40	107	36	103
Midland I	155	84	85	73	66	47	107	43	105
Midland II	142	79	78	65	69	46	96	49	110
East	117	74	64	58	56	50	85	48	69
South West	121	72	76	54	70	45	79	58	111
Wales I	154	100	91	88	70	57	129	45	111
Wales II	150	93	76	52	61	35	76	41	97
County boroughs*	167	88	83	71	64	43	104	38	102
Other urban districts*	152	83	83	66	66	43	97	43	105
Rural districts*	129	75	75	67	61	52	99	47	97

* Excluding Greater London.

The changing pattern of mortality in childhood.

Many of the greater advances in mortality in recent decades have been made against infections ; either against the secondary infections which constituted much of the fatality risk of the common fevers, or against the primary pneumonias of all ages, septic conditions of all kinds, or chronic infections such as tuberculosis. On the whole these causes loomed more important at younger rather than older ages and the result has been increased survival to the older age groups. It is commonplace that as a component of the general death rate, degenerative diseases of all kinds consequently have ever increasing importance and such changes have been epitomised in the social problem of the aged and chronic sick. There is also considerable emphasis given to the reduced wastage of life in infancy. It is not perhaps generally realised however how dramatic have been the changes in mortality risks at the ages of childhood, i.e. from 1 to 14 years.

Table XXX compares the rates of mortality per million at these ages, in 1939 and in 1949, from the principal groups of causes and certain selected causes. In the ten years the total death rate at ages 1–14 has fallen for boys from 2,021 to 1,048 per million, and for girls from 1,724 to 834, i.e. the rates have been approximately halved. The most striking fall in the fatality from measles had already occurred before 1939 and little further progress has been achieved (it is understated by the comparison in the table because 1939 was a year of low interepidemic prevalence) but for whooping cough and scarlet fever the reduction in mortality has continued. The approach toward the banishment of diphtheria by immunisation has been accomplished in a comparatively short period of time and if attacks of the disease have not ceased to occur at least deaths are exceedingly rare. The decline in mortality from tuberculosis has not been greater than the average reduction for all causes. Severe epidemic outbreaks of poliomyelitis have been manifest in this country only since 1947 and such an outbreak occurred in 1949 ; the higher mortality of 1949 is not necessarily typical of the level experienced over a period of years under present conditions but the increased importance of the disease as a cause of death must be accepted. Considerable reductions in mortality have occurred for

Table XXX.—Deaths and death rates per million living of children aged 1 to 14 years from the main groups of causes of death and from selected causes, by sex and age. 1939 and 1949.

International List No.	Cause of death		Males								Females							
			1939				1949				1939				1949			
			1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14
(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
	All Causes	**Deaths**	**4,299**	**2,361**	**1,649**	**8,309**	**2,576**	**1,213**	**903**	**4,692**	**3,625**	**1,836**	**1,467**	**6,928**	**2,065**	**832**	**683**	**3,580**
		Rate	*3,719*	*1,650*	*1,081*	*2,021*	*1,691*	*799*	*630*	*1,048*	*3,260*	*1,314*	*972*	*1,724*	*1,427*	*571*	*492*	*834*
1–44	I—Infective and Parasitic diseases	Deaths	1,434	873	403	**2,710**	657	261	145	**1,063**	1,360	765	497	**2,622**	622	188	154	**964**
		Rate	*1,240*	*610*	*264*	*659*	*431*	*172*	*101*	*238*	*1,223*	*548*	*329*	*653*	*430*	*129*	*111*	*225*
45–57	II—Cancer and other tumours ..	Deaths	73	56	48	**177**	111	79	71	**261**	63	52	45	**160**	113	53	32	**198**
		Rate	*63*	*39*	*31*	*43*	*73*	*52*	*50*	*58*	*57*	*37*	*30*	*40*	*78*	*36*	*23*	*46*
58–71	III—Rheumatism and other general diseases.	Deaths	68	81	90	**239**	35	36	42	**113**	63	90	128	**281**	37	38	70	**145**
		Rate	*59*	*57*	*59*	*58*	*23*	*24*	*29*	*25*	*57*	*64*	*85*	*70*	*26*	*26*	*50*	*34*
72–76	IV—Diseases of the blood and blood-forming organs.	Deaths	75	48	32	**155**	101	47	47	**195**	43	47	33	**123**	79	36	35	**150**
		Rate	*65*	*34*	*21*	*38*	*66*	*31*	*33*	*44*	*39*	*34*	*22*	*31*	*55*	*25*	*25*	*35*
80–89	VI—Diseases o the Nervous system and sense organs.	Deaths	289	149	122	**560**	177	70	64	**311**	225	108	135	**468**	128	61	48	**237**
		Rate	*250*	*104*	*80*	*136*	*116*	*46*	*45*	*69*	*202*	*77*	*89*	*116*	*88*	*42*	*35*	*55*
90–103	VII—Diseases of the circulatory system.	Deaths	28	91	147	**266**	18	20	65	**103**	21	67	158	**246**	15	35	61	**111**
		Rate	*24*	*64*	*96*	*65*	*12*	*13*	*45*	*23*	*19*	*48*	*105*	*61*	*10*	*24*	*44*	*26*
104–114	VIII—Diseases of the respiratory system.	Deaths	1,113	189	120	**1,422**	510	68	36	**614**	971	174	121	**1,266**	420	57	51	**528**
		Rate	*963*	*132*	*79*	*346*	*335*	*45*	*25*	*137*	*873*	*125*	*80*	*315*	*290*	*39*	*37*	*123*
115–129	IX—Diseases of the digestive system	Deaths	416	197	156	**769**	240	88	66	**394**	306	182	123	**611**	154	76	53	**283**
		Rate	*360*	*138*	*102*	*187*	*158*	*58*	*46*	*88*	*275*	*130*	*82*	*152*	*106*	*52*	*38*	*66*
130–139	X—Diseases of the urinary and genital systems.	Deaths	47	45	46	**138**	30	30	36	**96**	39	42	46	**127**	27	24	49	**100**
		Rate	*41*	*31*	*30*	*34*	*20*	*20*	*25*	*21*	*35*	*30*	*30*	*32*	*19*	*16*	*35*	*23*
157	XIV—Congenital malformations ..	Deaths	120	29	30	**179**	174	48	40	**262**	134	34	34	**202**	150	73	37	**260**
		Rate	*104*	*20*	*20*	*44*	*114*	*32*	*28*	*59*	*121*	*24*	*23*	*50*	*104*	*50*	*27*	*61*
163–198	XVII—Deaths from violence	Deaths	594	556	371	**1,521**	516	454	278	**1,248**	363	245	107	**715**	312	186	88	**586**
		Rate	*514*	*389*	*243*	*370*	*339*	*299*	*194*	*279*	*326*	*175*	*71*	*178*	*216*	*128*	*63*	*137*
	Other causes	Deaths	42	47	84	**173**	7	12	13	**32**	37	30	40	**107**	8	5	5	**18**
		Rate	*36*	*33*	*55*	*42*	*5*	*8*	*9*	*7*	*33*	*21*	*27*	*27*	*6*	*3*	*4*	*4*
(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)

Table XXX.—*continued*

International List No.	Cause of death		Males								Females							
			1939				1949				1939				1949			
			1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14	1–	5–	10–14	Total 1–14
(*a*)	(*b*)		(*c*)	(*d*)	(*e*)	(*f*)	(*g*)	(*h*)	(*i*)	(*j*)	(*k*)	(*l*)	(*m*)	(*n*)	(*o*)	(*p*)	(*q*)	(*r*)
13–22	Tuberculosis	Deaths	499	226	180	**905**	328	114	75	**517**	412	189	276	**877**	274	93	101	**468**
		Rate	*432*	*158*	*118*	*220*	*215*	*75*	*52*	*116*	*371*	*135*	*183*	*218*	*189*	*64*	*73*	*109*
1–12, 23–44	Remainder of Group I	Deaths	935	647	223	**1,805**	329	147	70	**546**	948	576	221	**1,745**	348	95	53	**496**
		Rate	*809*	*452*	*146*	*439*	*216*	*97*	*49*	*122*	*853*	*412*	*146*	*434*	*240*	*65*	*38*	*116*
8	Scarlet Fever	Deaths	37	16	10	**63**	1	4	1	**6**	30	23	7	**60**	1	5	1	**7**
		Rate	*32*	*11*	*7*	*15*	*1*	*3*	*1*	*1*	*27*	*16*	*5*	*15*	*1*	*3*	*1*	*2*
9	Whooping cough	Deaths	199	10	—	**209**	50	9	—	**59**	303	20	2	**325**	105	4	—	**109**
		Rate	*172*	*7*	—	*51*	*33*	*6*	—	*13*	*272*	*14*	*1*	*81*	*73*	*3*	—	*25*
10	Diphtheria	Deaths	414	477	127	**1,018**	22	11	1	**34**	361	436	126	**923**	19	7	5	**31**
		Rate	*358*	*333*	*83*	*248*	*14*	*7*	*1*	*8*	*325*	*312*	*83*	*230*	*13*	*5*	*4*	*7*
30	Syphilis	Deaths	5	4	5	**14**	1	—	3	**4**	2	—	3	**5**	1	1	2	**4**
		Rate	*4*	*3*	*3*	*3*	*1*	—	*2*	*1*	*2*	—	*2*	*1*	*1*	*1*	*1*	*1*
33	Influenza	Deaths	84	30	15	**129**	35	9	10	**54**	75	14	38	**127**	35	8	8	**51**
		Rate	*73*	*21*	*10*	*31*	*23*	*6*	*7*	*12*	*67*	*10*	*25*	*32*	*24*	*5*	*6*	*12*
35	Measles	Deaths	85	21	1	**107**	75	22	3	**100**	77	27	1	**105**	81	18	1	**100**
		Rate	*74*	*15*	*1*	*26*	*49*	*14*	*2*	*22*	*69*	*19*	*1*	*26*	*56*	*12*	*1*	*23*
36	Acute poliomyelitis and polioencephalitis	Deaths	15	21	12	**48**	61	58	33	**152**	11	9	11	**31**	43	34	24	**101**
		Rate	*13*	*15*	*8*	*12*	*40*	*38*	*23*	*34*	*10*	*6*	*7*	*8*	*30*	*23*	*17*	*24*
44b	Hodgkin's disease	Deaths	1	14	12	**27**	1	8	6	**15**	1	2	3	**6**	1	—	2	**3**
		Rate	*1*	*10*	*8*	*7*	*1*	*5*	*4*	*3*	*1*	*1*	*2*	*1*	*1*	—	*1*	*1*
45–55	Cancer and other malignant tumours	Deaths	56	36	32	**124**	91	60	47	**198**	48	32	28	**108**	95	42	26	**163**
		Rate	*48*	*25*	*21*	*30*	*60*	*39*	*33*	*44*	*43*	*23*	*19*	*27*	*66*	*29*	*19*	*38*
46	Cancer of digestive organs and peritoneum	Deaths	9	4	3	**16**	13	6	4	**23**	2	4	1	**7**	8	1	—	**9**
		Rate	*8*	*3*	*2*	*4*	*9*	*4*	*3*	*5*	*2*	*3*	*1*	*2*	*6*	*1*	—	*2*
47	Cancer of respiratory system	Deaths	1	1	1	**3**	4	4	2	**10**	—	—	—	—	2	1	1	**4**
		Rate	*1*	*1*	*1*	*1*	*3*	*3*	*1*	*2*	—	—	—	—	*1*	*1*	*1*	*1*

(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
52	Cancer of urinary organs	Deaths	18	1	1	**20**	29	11	1	**41**	21	9	—	**30**	28	6	—	**34**
		Rate	*16*	*1*	*1*	*5*	*19*	*7*	*1*	*9*	*19*	*6*	—	*7*	*19*	*4*	—	*8*
54	Cancer of brain and other parts of the nervous system.	Deaths	12	12	12	**36**	24	21	21	**66**	13	12	13	**38**	25	15	10	**50**
		Rate	*10*	*8*	*8*	*9*	*16*	*14*	*15*	*15*	*12*	*9*	*9*	*9*	*17*	*10*	*7*	*12*
58	Rheumatic fever	Deaths	15	59	55	**129**	7	28	31	**66**	14	65	93	**172**	6	29	54	**89**
		Rate	*13*	*41*	*36*	*31*	*5*	*18*	*22*	*15*	*13*	*47*	*62*	*43*	*4*	*20*	*39*	*21*
61	Diabetes mellitus	Deaths	4	9	25	**38**	3	3	5	**11**	8	15	27	**50**	2	4	14	**20**
		Rate	*3*	*6*	*16*	*9*	*2*	*2*	*3*	*2*	*7*	*11*	*18*	*12*	*1*	*3*	*10*	*5*
74	Leukæmia and aleukæmia	Deaths	49	31	23	**103**	87	32	38	**157**	29	26	14	**69**	68	30	27	**125**
		Rate	*42*	*22*	*15*	*25*	*57*	*21*	*27*	*35*	*26*	*19*	*9*	*17*	*47*	*21*	*19*	*29*
83	Intra-cranial lesions of vascular origin ..	Deaths	1	2	3	**6**	4	1	—	**5**	5	3	6	**14**	3	4	6	**13**
		Rate	*1*	*1*	*2*	*1*	*3*	*1*	—	*1*	*4*	*2*	*4*	*3*	*2*	*3*	*4*	*3*
89	Diseases of the ear and mastoid antrum	Deaths	58	50	40	**148**	25	5	11	**41**	47	39	40	**126**	12	10	10	**32**
		Rate	*50*	*35*	*26*	*36*	*16*	*3*	*8*	*9*	*42*	*28*	*27*	*31*	*8*	*7*	*7*	*7*
90–95	Heart diseases	Deaths	23	84	145	**252**	14	19	59	**92**	15	64	156	**235**	12	34	58	**104**
		Rate	*20*	*59*	*95*	*61*	*9*	*13*	*41*	*21*	*13*	*46*	*103*	*58*	*8*	*23*	*42*	*24*
106	Bronchitis	Deaths	159	23	26	**208**	57	12	6	**75**	154	24	20	**198**	47	17	11	**75**
		Rate	*138*	*16*	*17*	*51*	*37*	*8*	*4*	*17*	*138*	*17*	*13*	*49*	*32*	*12*	*8*	*17*
107–109	Pneumonia (all forms)	Deaths	881	142	72	**1,095**	402	45	23	**470**	760	127	85	**972**	344	37	34	**415**
		Rate	*762*	*99*	*47*	*266*	*264*	*30*	*16*	*105*	*683*	*91*	*56*	*242*	*238*	*25*	*25*	*97*
121	Appendicitis	Deaths	77	93	98	**268**	58	37	37	**132**	51	81	58	**190**	38	27	29	**94**
		Rate	*67*	*65*	*64*	*65*	*38*	*24*	*26*	*29*	*46*	*58*	*38*	*47*	*26*	*19*	*21*	*22*
122	Hernia : intestinal obstruction	Deaths	56	16	7	**79**	36	9	11	**56**	21	9	10	**40**	17	7	6	**30**
		Rate	*48*	*11*	*5*	*19*	*24*	*6*	*8*	*13*	*19*	*6*	*7*	*10*	*12*	*5*	*4*	*7*
130–132	Nephritis	Deaths	36	39	41	**116**	17	22	31	**70**	30	34	40	**104**	18	20	42	**80**
		Rate	*31*	*27*	*27*	*28*	*11*	*14*	*22*	*16*	*27*	*24*	*27*	*26*	*12*	*14*	*30*	*19*
157c	Congenital malformation of heart ..	Deaths	48	15	15	**78**	73	20	20	**113**	74	20	22	**116**	66	35	22	**123**
		Rate	*42*	*10*	*10*	*19*	*48*	*13*	*14*	*25*	*67*	*14*	*15*	*29*	*46*	*24*	*16*	*29*
163–164	Suicide	Deaths	—	—	2	**2**	—	—	2	**2**	—	—	1	**1**	—	—	1	**1**
		Ra e	—	—	*1*	*0*	—	—	*1*	*0*	—	—	*1*	*0*	—	—	*1*	*0*
170	Motor vehicle accidents	Deaths	163	281	165	**609**	192	226	115	**533**	90	124	54	**268**	102	107	44	**253**
		Rate	*141*	*196*	*108*	*148*	*126*	*149*	*80*	*119*	*81*	*89*	*36*	*67*	*70*	*73*	*32*	*59*
181	Accidental burns (conflagration excepted)	Deaths	220	21	4	**245**	66	8	2	**76**	158	54	20	**232**	82	22	4	**108**
		Rate	*190*	*15*	*3*	*60*	*43*	*5*	*1*	*17*	*142*	*39*	*13*	*58*	*57*	*15*	*3*	*25*
183	Accidental drowning	Deaths	91	136	73	**300**	122	118	59	**299**	25	17	2	**44**	37	20	13	**70**
		Rate	*79*	*95*	*48*	*73*	*80*	*78*	*41*	*67*	*22*	*12*	*1*	*11*	*26*	*14*	*9*	*16*

causes classified to the rheumatic, nervous, respiratory, and circulatory groups. These arise from the reductions in rheumatic fever and endocarditis, diseases of ear and mastoid, non-tuberculous meningitis, pneumonia, appendicitis and intestinal obstruction which are discussed elsewhere. In contrast there has been an increase in deaths classed to congenital malformation, to cancer and other tumours, and to diseases of the blood and blood forming organs (leukæmia). Mortality from violent causes (particularly motor accidents and drownings) has not fallen as much as has mortality from all causes taken as a whole ; but there has been a substantial reduction in mortality from burns.

The effect of all these changes may be summarised as follows :—

Death rates by cause groups per cent. of death rate for all causes combined at ages 1–14 *;* 1939 *and* 1949.

International List No.	Cause of death	Males		Females	
		1939	1949	1939	1949
13–22	Tuberculosis ..	10·9	11·1	12·6	13·1
1–12, 23–44	Non-tuberculous Infective and Parasitic	21·7	11·6	25·2	13·9
107–109	Pneumonia ..	13·2	10·0	14·0	11·6
89	Diseases of ear, mastoid	1·8	0·9	1·8	0·8
		36·7	22·5	41·0	26·3
45–55, 74	Cancer	2·7	7·5	2·6	8·0
58, 83, 90–103	Cardiovascular ..	4·8	3·7	6·3	6·0
163–198	Violence	18·3	26·6	10·3	16·4
	Other causes ..	26·6	28·6	27·2	30·2
	All causes	**100·0**	**100·0**	**100·0**	**100·0**

For boys, tuberculosis retains its one-ninth representation but other infectious diseases, pneumonia and ear and mastoid diseases have in ten years become less important—formerly providing more than a third of all deaths, in 1949 these causes were responsible for less than a quarter. The death rate for cancer has risen and the proportional representation has been increased from 2·7 to 7·5 per cent. Cardiovascular causes have had their share only slightly reduced, the death rates having fallen no more than for all causes combined. Violent causes, having receded less than others, have become relatively more prominent; the proportion has risen from just less than one-fifth to rather more than one-quarter. *For girls* the story is much the same but since the violence death rates are always less than for boys the other percentages tend to be greater. There is a similar recession in the proportion of infection and increases in the proportions of cancer and violence.

In both sexes the two most striking changes are (i) within the infective and parasitic group (1–44) tuberculosis has increased its share from one-third to one-half, not because the death rate from tuberculosis has not fallen substantially but because the rates for other infectious causes have fallen much more, (ii) formerly less important than cardiovascular causes, cancer now takes a more prominent position. Though deaths from heart disease and other circulatory diseases have fallen, the deaths assigned to cancer and other malignant tumours have increased. These changes are illustrated by the diagram on page 57.

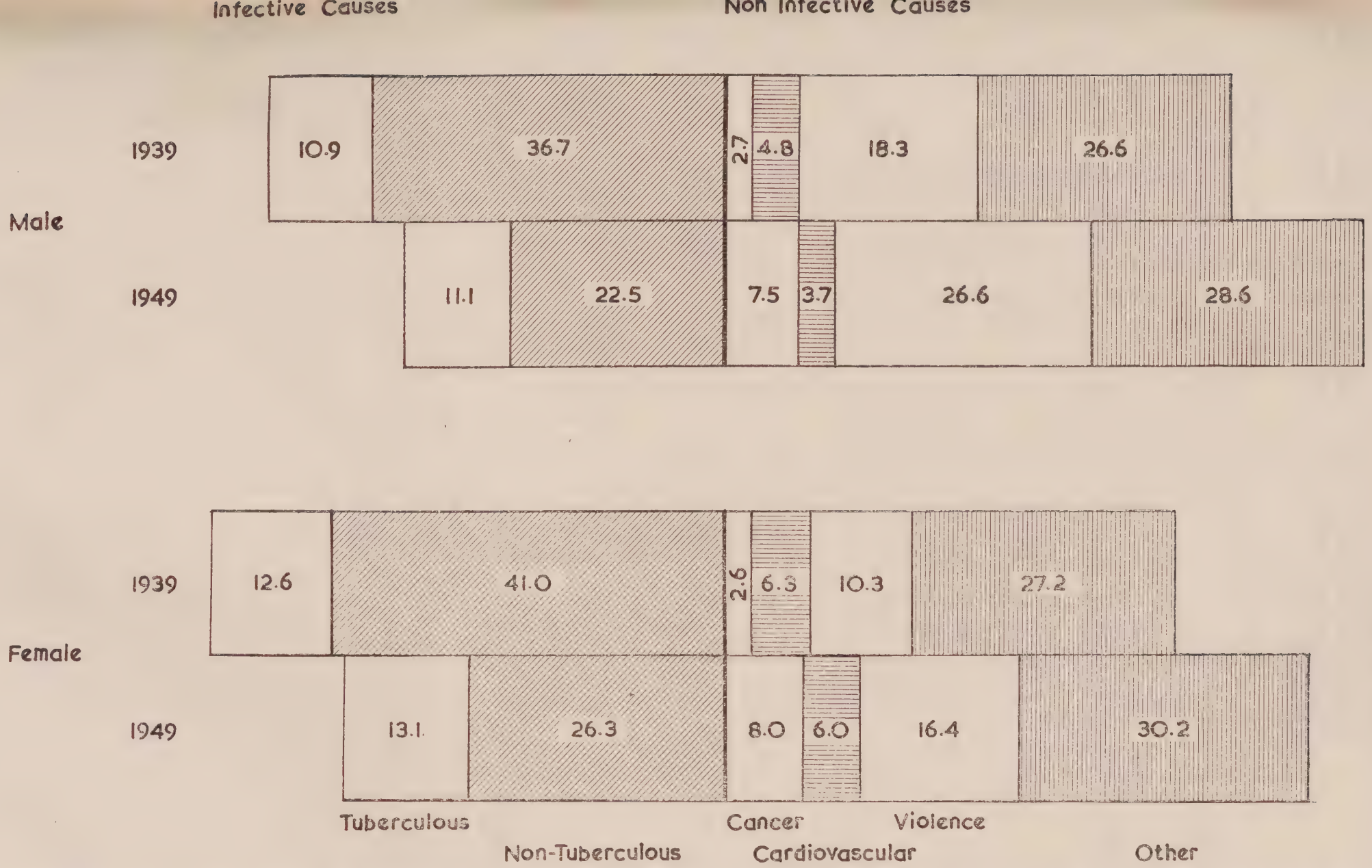


Diagram 2.—Deaths from certain infective and non-infective cause-groups per cent. of all deaths at ages 1–14 years by sex, 1939 and 1949.

Table XXXI.—Mortality from All Causes at Quinquennial Age groups after 15, 1936–39 and each year 1940 to 1949, excluding deaths from operations of War in years 1940 to 1945 (Civilians only from 3rd September, 1939, for males and from 1st June, 1941, for females.)

Sex and Age	Death rate per 1,000 living										
	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Males											
15– ..	2·01	2·15	2·31	2·01	2·02	1·73	1·74	1·52	1·62	1·30	1·27
20– ..	2·77	4·18	4·83	4·65	4·95	4·56	4·68	2·66	2·05	1·54	1·59
25– ..	2·76	3·38	4·08	3·94	4·21	4·47	4·11	2·11	2·02	1·74	1·66
30– ..	3·01	3·39	3·76	3·58	3·79	3·76	3·56	2·35	2·22	2·00	1·87
35– ..	4·00	4·33	4·28	3·95	4·02	3·85	3·56	2·86	2·78	2·52	2·48
40– ..	5·57	6·00	5·59	5·14	5·28	5·03	4·64	4·25	4·12	3·79	3·77
45– ..	8·31	9·05	8·10	7·54	7·67	7·32	7·04	7·07	7·03	6·58	6·59
50– ..	13·06	14·47	12·57	11·36	12·06	11·30	11·16	11·08	11·31	10·24	10·52
55– ..	19·30	22·29	19·69	17·98	18·47	17·61	17·52	17·60	17·86	16·78	17·50
60– ..	29·76	33·37	29·53	27·13	27·52	27·61	27·53	27·71	28·59	27·05	28·53
65– ..	44·61	49·49	44·96	42·45	42·28	41·65	41·37	40·51	42·11	40·00	42·97
70– ..	72·24	76·84	68·34	63·32	64·04	62·19	62·50	62·12	66·54	60·86	66·68
75– ..	118·17	129·72	115·04	104·31	105·47	99·14	98·38	100·69	106·61	93·46	103·25
80– ..	178·78	201·09	178·65	158·45	162·25	155·36	155·83	155·17	169·80	142·49	159·73
85 and over	281·77	302·08	258·02	232·64	233·94	211·46	204·65	232·33	266·53	210·21	248·95
Females											
15– ..	1·75	1·85	1·85	1·67	1·63	1·39	1·33	1·17	1·21	1·12	0·96
20– ..	2·39	2·41	2·39	2·33	2·31	2·13	2·04	1·78	1·82	1·56	1·43
25– ..	2·52	2·41	2·46	2·39	2·31	2·17	2·04	1·93	1·90	1·74	1·56
30– ..	2·70	2·57	2·52	2·30	2·47	2·31	2·12	2·05	1·97	1·81	1·76
35– ..	3·30	3·20	2·90	2·76	2·83	2·52	2·51	2·41	2·35	2·08	2·14
40– ..	4·23	4·19	3·90	3·57	3·72	3·35	3·24	3·19	3·15	2·83	2·83
45– ..	5·99	6·09	5·66	5·29	5·27	4·86	4·77	4·84	4·64	4·27	4·33
50– ..	8·74	9·01	8·05	7·35	7·54	7·08	7·02	6·90	6·92	6·51	6·54
55– ..	12·61	13·27	11·83	11·05	11·02	10·26	10·29	10·31	10·26	9·51	9·99
60– ..	20·33	21·36	18·37	16·82	17·03	16·30	16·41	16·61	16·22	15·20	15·97
65– ..	32·15	34·61	30·56	27·76	28·22	26·70	26·49	26·38	26·43	24·38	26·52
70– ..	53·09	57·61	50·46	45·37	47·33	44·38	45·35	45·51	46·74	42·05	46·90
75– ..	88·51	97·01	84·34	76·01	78·92	73·22	74·48	76·25	79·47	70·30	79·02
80– ..	136·97	152·86	134·12	120·51	129·30	121·35	120·32	123·33	129·61	111·74	127·76
85 and over	248·56	265·94	240·93	208·91	213·34	188·34	189·48	206·15	219·79	183·53	217·54

Young Adults (Ages 15–24)

Table XXXI shows the death rates at ages 15–19 and 20–24 in 1936–39 and each year 1940 to 1949, deaths from war operations and deaths of non-civilians being excluded during the years indicated.

At **ages 15–19** the mortality of males was still to some extent affected by selection for military service, approximately 21 per cent. of the total male population at these ages being in the forces in 1948 and 1949. On an assumption that the mortality experienced by those selected to become non-civilians at these ages was only half that of the total male population from which they were drawn, their exclusion would inflate the death rate by 13 per cent.*; and if the mortality of the non-civilians was three-quarters of that of the total male population at these ages, the inflation caused by their exclusion would be by 7 per cent. Despite this inflation death rates in 1948 and 1949 of civilian males aged 15–19 had fallen to 65 and 63 per cent. of the average rate during 1936–39. For women of these ages, whose rates were not appreciably affected by the withdrawal of non-civilians, the rates in 1948 and 1949 were 64 and 55 per cent. respectively of the annual average in 1936–39.

* See 1946–47 Text (Medical), pages 50–52.

Table XXXII.—Death rates per 1,000 living at Ages 15–24 and 25–49 from Various Causes in 1936–38, 1948 and 1949 (excluding non-civilians from 1948).

International List No.	Cause of death	MALES			FEMALES		
		1936–38*	1948	1949	1936–38*	1948	1949
		Ages 15–24 (l.b.d.)					
13–22	Tuberculosis	0·67	0·43	0·36	0·93	0·73	0·59
Rem. of 1–44	Other infectious diseases	0·16	0·05	0·07	0·13	0·04	0·06
45–55	Cancer	0·05	0·06	0·07	0·04	0·05	0·04
61	Diabetes	0·02	0·01	0·01	0·01	0·01	0·01
74 (*a*)	Leukæmia	0·02	0·02	0·02	0·01	0·01	0·02
93 (*c*) (1), 94	Coronary and myocardial disease with arterio-sclerosis	—	—	—	—	—	—
107–109	Pneumonia	0·15	0·03	0·04	0·09	0·03	0·03
Rem. of 104–114	Other respiratory diseases	0·05	0·04	0·04	0·03	0·03	0·03
121	Appendicitis	0·07	0·03	0·03	0·04	0·01	0·01
Rem. of 115–129	Other digestive diseases	0·08	0·04	0·03	0·06	0·03	0·03
	All other diseases	0·56	0·33	0·31	0·64	0·33	0·30
163–198	Violence	0·60	0·39	0·46	0·14	0·07	0·09
	All Causes	**2·43**	**1·44**	**1·44**	**2·12**	**1·34**	**1·22**
		Ages 25–49 (l.b.d.)					
13–22	Tuberculosis	0·97	0·72	0·64	0·65	0·52	0·47
Rem. of 1–44	Other infectious diseases	0·28	0·09	0·12	0·18	0·05	0·08
45–55	Cancer	0·42	0·54	0·53	0·61	0·61	0·62
61	Diabetes	0·02	0·02	0·01	0·03	0·02	0·01
74 (*a*)	Leukæmia	0·02	0·02	0·03	0·02	0·02	0·02
93 (*c*) (1), 94	Coronary and myocardial disease with arterio-sclerosis	0·11	0·27	0·28	0·03	0·05	0·05
107–109	Pneumonia	0·41	0·09	0·09	0·20	0·06	0·07
Rem. of 104–114	Other respiratory diseases	0·15	0·19	0·20	0·07	0·09	0·11
121	Appendicitis	0·07	0·02	0·02	0·04	0·01	0·01
Rem. of 115–129	Other digestive diseases	0·29	0·18	0·17	0·18	0·09	0·08
	All other diseases	1·20	0·72	0·72	1·51	0·87	0·86
163–198	Violence	0·63	0·41	0·43	0·19	0·13	0·12
	All Causes	**4·56**	**3·27**	**3·24**	**3·71**	**2·52**	**2·50**

* Corrected to conform to the 1940 classification.

At **ages 20–24** approximately 12 per cent. of the total male population were non-civilians in 1948 and 1949, in contrast with 53 per cent. in 1946 and 71 per cent. in 1944. On the assumptions mentioned in the previous paragraph inflation of the residual civilian death rates in 1948 and 1949 probably lay between 3 and 7 per cent., compared with about 100 per cent. during 1940–45. In spite of this inflation the death rates of males in 1948 and 1949 were 56 and 57 per cent. of the average rates during 1936–39, the corresponding death rates of females being 65 and 60 per cent. of the rate in 1936–39. It is a unique event that the death rate of males in 1948, 1·54 per 1,000, was lower than the corresponding rate for females, 1·56 per 1,000, thus bringing about a reversal of the customary mortality sex ratio (*see* Table VI on page 14).

The table below shows the death rates per million of each sex at ages 20–24 in 1936–39, 1947, 1948, and 1949, from tuberculosis, violence, and all other causes, and rates of males expressed per cent. of females. These figures show that between 1947 and 1948, the mortality of females from tuberculosis, constituting about half of their total mortality, declined by only 12 per cent. in contrast with males among whom the decline was 29 per cent. Deaths of males from violence were reduced by 23 per cent. between 1947 and 1948, those of women by only 7 per cent. In 1949, however, deaths from violence increased equally in each sex and displaced tuberculosis as the leading cause of death of males at these ages.

(55588)

Death rates per million at ages 20–24

	1936–39	1947	1948	1949
Male				
All Causes	2,795	2,053	1,539	1,591
Tuberculosis	888	702	499	457
Violence	751	545	421	501
Other	1,156	806	619	633
Female				
All Causes	2,423	1,820	1,555	1,429
Tuberculosis	1,113	999	875	740
Violence	151	82	76	91
Other	1,159	739	604	598
Male per cent. of Female				
All Causes	115	113	99	111
Tuberculosis	80	70	57	62
Violence	497	665	554	551
Other	100	109	102	106

Adults aged 25–49

At ages 25–29 only 5 per cent. of the total male population were classed as non-civilians in 1948 and 4 per cent. in 1949; the effect of their withdrawal upon the death rates was negligible. No allowance need therefore be made for the influence of civilian selection. Table XXXI indicates that the death rates of males aged 25–29 in 1948 and 1949 were 63 and 60 per cent. respectively of the rate in 1936–39, corresponding rates for women being 69 and 62 per cent. of the rate in 1936–39.

At ages from 30 to 49, the death rates in 1948 and 1949 expressed per cent. of the corresponding average annual rates in 1936–39 were :—

	Male		Female	
	1948	1949	1948	1949
30–34	66	62	67	65
35–39	63	62	63	65
40–44	68	68	67	67
45–49	79	79	71	72

In each age group from 30 to 44 death rates in each sex declined by about one-third between 1936–39 and 1948–49. At 45–49 the decline for males was about a fifth and for females just over a quarter.

Adults aged 50 and over

Death rates at these ages from 1936–39 to 1949 are given in Table XXXI. In contrast with younger ages the death rates of persons aged 50 and over were higher in 1949 than in 1948; the combination in 1948 of a mild winter and a very low prevalence of influenza led to an unprecedentedly low mortality among elderly persons.

Rates in 1948 and 1949 expressed per cent. of corresponding rates in 1936–39 are shown in the table below :—

	Male		Female	
	1948	1949	1948	1949
50–	78	81	74	75
55–	87	91	75	79
60–	91	96	75	79
65–	90	96	76	82
70–	84	92	79	88
75–	79	87	79	89
80–	80	89	82	93
85 and over	75	88	74	88

At ages from 50 to 74 improvement among females was greater than among males. Whereas the amount of improvement in the death rates of females lessened with increasing age from 50 to 84, among males there was much less improvement at 55–70 than at lower or higher ages.

Death rates from various causes in 1936–38, 1947, 1948, and 1949 are given in Table XXXIII by sex and by four separate age groups, 50–54, 55–64, 65–69, and 70 and over.

At **ages 50–54** cancer accounted for 25 and 23 per cent. of the total deaths of males in 1948 and 1949, compared with 16 per cent. in 1936–38. To coronary disease was attributed 15 and 16 per cent. of deaths in 1948 and 1949, compared with 7 per cent. in 1936–38; on the other hand the proportion of deaths assigned to myocardial disease and senility declined from 6 per cent. in 1936–38 to 4 and 3 per cent. respectively in 1948 and 1949. The proportion of deaths from tuberculosis changed little, 10 per cent. in 1936–38, 11 per cent. in 1948, 10 per cent. in 1949, but pneumonia contributed only 3 per cent. of deaths in 1948–49 compared with 8 per cent. in 1936–38.

More than a third of the deaths of women aged 50–54 were ascribed to cancer in 1948–49, 36 and 34 per cent. respectively, compared with 27 per cent. in 1936–38. Next in importance were intracranial vascular lesions accounting for 12 per cent. of deaths in 1948 and 1949, with death rates of 0·76 per 1,000, compared with 9 per cent. in 1936–38, with a death rate of 0·79 per 1,000. There were small reductions in the proportion of deaths from tuberculosis, 5 per cent. in 1936–38, 4 per cent. in 1948–49, and myocardial disease including senility, 6 per cent. in 1936–38, 4 per cent. in 1948–49, and a proportionate increase in deaths described as resulting from coronary disease, 3 per cent. in 1936–38, 6 per cent. in 1948–49.

At **ages 55–64,** where as previously indicated, the improvement in the mortality of males has been small compared with other ages during recent years, 23 and 22 per cent. respectively of deaths in 1948 and 1949 were due to cancer compared with 19 per cent. in 1936–38. The death rate from coronary disease was 2·18 per 1,000 in 1936–38, 2·88 in 1943–45 and thereafter in successive years 3·38, 3·67, 3·82, and 4·32, the proportion of total deaths increasing from 9 per cent. in 1936–38 to 19 per cent. in 1949. Little change was recorded in the proportion of mortality from intracranial vascular lesions, 9 per cent. of deaths in 1936–38 and in 1948, 8 per cent. in 1949. The death rate from tuberculosis remained about the same in 1948 (1·21 per 1,000) and 1949 (1·19) as in 1936–38 (1·22), but the death rate from pneumonia declined from 1·44 to 0·71 and 0·80 per 1,000.

(55588)

Table XXXIII.—Death rates per 1,000 living at ages 50 and over from Various Causes in 1936–38, 1947, 1948 and 1949.

International List No.	Cause of death	MALES				FEMALES			
		1936–38*	1947†	1948†	1949†	1936–38*	1947†	1948†	1949†
		Ages 50–54 (l.b.d.)							
13–22	Tuberculosis	1·32	1·15	1·08	1·00	0·40	0·29	0·27	0·26
45–55	Cancer	2·07	2·42	2·51	2·45	2·41	2·26	2·34	2·20
61	Diabetes	0·08	0·04	0·04	0·04	0·14	0·06	0·04	0·06
83	Intra-cranial vascular lesions	0·72	0·71	0·56	0·64	0·79	0·76	0·77	0·76
93 (*c*1), 94	Coronary and myocardial disease with arterio-sclerosis	0·88	1·58	1·55	1·68	0·26	0·35	0·37	0·41
93 (*c*2, 3), 93 (*d*), 162 (*a*), (*c*)	Other myocardial degeneration and senility	0·74	0·47	0·36	0·34	0·56	0·31	0·24	0·26
33	Influenza	0·35	0·09	0·03	0·12	0·19	0·05	0·02	0·06
107–109	Pneumonia	1·07	0·45	0·35	0·35	0·41	0·20	0·14	0·16
115–129	Diseases of digestive system	5·00	0·63	0·56	0·59	3·33	0·27	0·26	0·26
130–139	Diseases of genito-urinary system		0·38	0·38	0·31		0·33	0·26	0·26
	All other diseases		2·73	2·21	2·38		1·78	1·53	1·61
163–195, 198	Violence (except War Operations)	0·91	0·65	0·61	0·60	0·35	0·26	0·26	0·24
	All Causes (except War Operations)	**13·14**	**11·29**	**10·22**	**10·51**	**8·84**	**6·92**	**6·51**	**6·54**
197	Operations of War	0·01	0·02	0·02	0·02	—	—	0·00	—
		Ages 55–64 (l.b.d.)							
13–22	Tuberculosis	1·22	1·27	1·21	1·19	0·39	0·29	0·27	0·28
45–55	Cancer	4·60	4·93	5·02	5·01	3·92	3·71	3·71	3·62
61	Diabetes	0·20	0·09	0·09	0·08	0·34	0·20	0·17	0·16
83	Intra-cranial vascular lesions	2·07	2·00	1·87	1·92	1·97	1·94	1·79	1·82
93 (*c*1), 94	Coronary and myocardial disease with arterio-sclerosis	2·18	3·67	3·82	4·32	0·85	1·24	1·37	1·52
93 (*c*2, 3), 93 (*d*), 162 (*a*), (*c*)	Other myocardial degeneration and senility	1·99	1·50	1·24	1·26	1·58	0·96	0·81	0·80
33	Influenza	0·53	0·18	0·06	0·25	0·36	0·08	0·03	0·15
107–109	Pneumonia	1·44	0·89	0·71	0·80	0·67	0·40	0·27	0·39
115–129	Diseases of digestive system	8·63	1·01	0·98	0·96	5·75	0·53	0·45	0·49
130–139	Diseases of genito-urinary system		0·93	0·84	0·73		0·52	0·45	0·43
	All other diseases		5·53	4·85	5·31		2·87	2·53	2·84
163–195, 198	Violence (except War Operations)	1·21	0·83	0·82	0·78	0·46	0·36	0·35	0·34
	All Causes (except War Operations)	**24·07**	**22·83**	**21·53**	**22·62**	**16·29**	**13·08**	**12·20**	**12·82**
197	Operations of War	0·01	0·02	0·02	0·02	—	—	0·00	—
		Ages 65–69 (l.b.d.)							
13–22	Tuberculosis	0·87	0·99	1·09	1·17	0·35	0·27	0·28	0·27
45–55	Cancer	8·65	8·53	8·81	8·83	6·18	5·85	5·63	5·75
61	Diabetes	0·50	0·23	0·17	0·21	0·75	0·42	0·37	0·42
83	Intra-cranial vascular lesions	5·15	5·05	4·62	4·84	4·65	4·73	4·22	4·38
93 (*c*1), 94	Coronary and myocardial disease with arterio-sclerosis	4·77	7·75	7·74	8·64	2·47	3·58	3·81	4·38
93 (*c*2, 3), 93 (*d*), 162 (*a*), (*c*)	Other myocardial degeneration and senility	5·20	3·91	3·20	3·53	4·41	2·86	2·44	2·58
33	Influenza	0·73	0·22	0·10	0·43	0·64	0·16	0·05	0·36
107–109	Pneumonia	1·97	1·42	1·22	1·52	1·21	0·81	0·58	0·82
115–129	Diseases of digestive system	15·45	1·52	1·48	1·47	10·92	0·87	0·81	0·89
130–139	Diseases of genito-urinary system		2·09	1·96	1·93		0·91	0·84	0·81
	All other diseases		9·30	8·58	9·43		5·45	4·88	5·36
163–195, 198	Violence (except War Operations)	1·38	1·08	1·01	0·94	0·7[4]	0·53	0·47	0·50
	All Causes (except War Operations)	**44·67**	**42·09**	**39·99**	**42·96**	**32·32**	**26·43**	**24·38**	**26·52**
197	Operations of War	0·00	0·02	0·01	0·01	—	0·00	—	0·00
		Ages 70 and over (l.b.d.)							
13–22	Tuberculosis	0·48	0·50	0·54	0·57	0·27	0·20	0·18	0·19
45–55	Cancer	13·07	13·13	13·18	13·54	9·90	9·43	9·42	9·46
61	Diabetes	0·85	0·51	0·45	0·49	1·00	0·72	0·69	0·73
83	Intra-cranial vascular lesions	13·11	13·38	11·70	13·05	12·15	13·50	12·19	13·51
93 (*c*1), 94	Coronary and myocardial disease with arterio-sclerosis	11·74	17·62	16·74	19·52	7·96	12·23	11·78	14·14
93 (*c*2, 3), 93 (*d*), 162 (*a*), (*c*)	Other myocardial degeneration and senility	25·28	22·43	17·88	19·60	25·12	22·20	18·16	20·47
33	Influenza	1·50	0·59	0·20	1·05	1·56	0·53	0·17	1·03
107–109	Pneumonia	3·48	3·35	2·70	3·52	2·82	2·66	2·07	2·97
115–129	Diseases of digestive system	35·69	2·34	2·18	2·22	25·42	1·82	1·68	1·67
130–139	Diseases of genito-urinary system		6·72	5·85	6·09		2·10	1·78	1·87
	All other diseases		19·82	16·62	19·17		15·49	13·03	15·36
163–195, 198	Violence (except War Operations)	2·53	2·05	1·79	1·90	2·30	1·88	1·63	1·71
	All Causes (except War Operations)	**107·73**	**102·43**	**89·84**	**100·71**	**88·50**	**82·76**	**72·79**	**83·12**
197	Operations of War	0·00	0·00	0·00	0·01	—	—	0·00	—

* Corrected to conform with 1940 classification.
† Excluding non-civilians.

Amongst women at ages 55–64 proportionate mortality from cancer increased from 24 per cent. in 1936–38, to 30 and 28 per cent. in 1948 and 1949 though the death rate fell slightly from 3·92 per 1,000 in 1936–38 to 3·62 in 1949. There was also a decline in the death rate from intracranial vascular lesions from 1·97 per 1,000 in 1936–38 to 1·79 and 1·82 in 1948 and 1949, but the percentage of deaths attributed to this cause increased from 12 to 15 and 14 respectively. The proportion of deaths assigned to coronary disease rose from 5 per cent. in 1936–38 to 11 and 12 per cent. in 1948–49 and deaths from myocardial disease declined from 10 to 7 and 6 per cent.

At **ages 65–69** where, as for the previous age group, the death rate of males has been slow to decline, the proportion of deaths from cancer increased from 19 per cent. in 1936–38 to 22 and 21 per cent. in 1948 and 1949, and deaths from coronary disease increased from 11 per cent. to 19 and 20 per cent. The proportion of deaths from intracranial vascular lesions underwent little alteration, 12 per cent. in 1936–38 and 1948 and 11 per cent. in 1949, but deaths certified as from myocardial disease declined from 12 to 8 per cent. The tuberculosis death rate increased from 0·87 per 1,000 in 1936–38 to 1·09 and 1·17 in 1948 and 1949, resulting in an increase in proportionate mortality from 2 to 3 per cent. The death rate from pneumonia was much higher in 1949 than in 1948 in association with a greater prevalence of influenza.

Amongst women aged 65–69 the percentage of deaths assigned to cancer increased from 19 in 1936–38 to 23 and 22 in 1948 and 1949, and deaths from intracranial vascular lesions increased from 14 to 17 per cent. of the total deaths from all causes. A much larger proportionate increase took place among deaths certified to coronary disease, from 8 per cent. in 1936–38 to 16 and 17 per cent. in 1948 and 1949, the rate per 1,000 increasing from 2·47 to 3·81 and 4·38. There was, however, a compensating reduction in deaths from myocardial disease, the percentage declining from 4·41 in 1936–38 to 2·44 and 2·58.

At **ages 70 and over** deaths of males from myocardial disease and senility accounted for 23 per cent. of the total in 1936–38, 20 and 19 per cent. in 1948 and 1949. Deaths from coronary disease, on the other hand, increased proportionately from 11 to 19 per cent., cancer from 12 to 15 and 13 per cent., and intracranial vascular lesions from 12 to 13 per cent. As in the previous age group the death rates from pneumonia and influenza were much higher in 1949 than in 1948. The death rate from tuberculosis increased from 0·48 per 1,000 in 1936–38 to 0·50, 0·54 and 0·57 in 1947, 1948 and 1949.

25 per cent. of the deaths of women aged 70 and over were attributed to myocardial disease or senility in 1948–49, compared with 28 per cent. in 1936–38. On the other hand, a larger proportion of deaths was recorded from intracranial vascular lesions, 14 per cent. in 1936–38 increasing to 17 and 16 per cent. in 1948 and 1949, and a still greater increase in the proportion of deaths assigned to coronary disease, 9 per cent. increasing to 16 and 17 per cent.

The striking feature of these recent changes in mortality at ages 50 and over has been the increasing proportion of deaths in each group attributed to coronary disease. Amongst women this has been compensated for by a reduction in mortality from the myocardial group of diseases, including senility ; but compensation is far from complete amongst males, as is shown in the following table comparing the aggregate death rates from the coronary and the myocardial groups in 1936–38 and 1948–49 :—

	Male		Female	
	1936–38	1948–49	1936–38	1948–49
50–54	1·62	1·97	0·82	0·64
55–64	4·17	5·32	2·43	2·25
65–69	9·97	11·56	6·88	6·61
70 and over	37·02	36·87	33·08	32·28

(55588)

At ages 50–69 the death rates of males from coronary and myocardial diseases together were considerably higher in 1948–49 than 1936–38. Amongst women the combined death rate at each age declined. When it is remembered that the total death rates (all causes) of males aged 55–70 have declined much less in recent years than the rates at other ages, one is led to the conclusion that the increasing mortality ascribed to coronary disease at these ages is unlikely wholly to be the result of changing fashions in certification. The possibility of a real increase in mortality from this cause must not be discounted.

Deaths of Centenarians

Tables XXXIV and XXXV give details of deaths of reputed centenarians. There were 126 in 1948 and 160 in 1949 compared with 116 in 1946 and 1947, 112 in 1939, 91 in 1931 and 59 in 1921.

Table XXXIV.—Age at Death of Centenarians, 1948 and 1949.

Area	Males						Females									
	100 and over	100	101	102	103	104	100 and over	100	101	102	103	104	105	106	107	115
1948																
Greater London	5	3	1	1	—	—	26	11	5	4	4	—	—	1	1	—
Rest of South East	4	2	2	—	—	—	37	18	8	4	5	1	—	1	—	—
North	3	—	2	1	—	—	8	3	2	2	1	—	—	—	—	—
Midland	2	—	2	—	—	—	10	5	2	2	1	—	—	—	—	—
East	3	1	—	—	2	—	5	4	1	—	—	—	—	—	—	—
South West	1	1	—	—	—	—	18	8	—	6	1	2	—	—	1	—
Wales	1	—	—	1	—	—	3	2	—	—	—	—	—	—	—	1
England and Wales	**19**	**7**	**7**	**3**	**2**	**—**	**107**	**51**	**18**	**18**	**12**	**3**	**—**	**2**	**2**	**1**
1949																
Greater London	5	2	2	1	—	—	35	19	5	6	2	1	2	—	—	—
Rest of South East	7	2	2	1	—	2	40	14	14	4	4	3	—	1	—	—
North	3	—	2	—	—	1	20	9	4	4	2	1	—	—	—	—
Midland	5	3	—	2	—	—	13	7	2	2	—	2	—	—	—	—
East	3	2	1	—	—	—	7	4	1	1	—	1	—	—	—	—
South West	3	1	1	1	—	—	15	3	4	3	4	—	1	—	—	—
Wales	1	—	1	—	—	—	3	1	2	—	—	—	—	—	—	—
England and Wales	**27**	**10**	**9**	**5**	**—**	**3**	**133**	**57**	**32**	**20**	**12**	**8**	**3**	**1**	**—**	**—**

Table XXXV.—Annual numbers of deaths of reputed Centenarians, 1921 to 1949.

Year	Males	Females	Year	Males	Females
1921	21	38	1936	14	82
1922	18	59	1937	21	79
1923	22	74	1938	16	93
1924	22	64	1939	22	90
1925	23	69	1940	20	102
1926	27	61	1941	18	91
1927	16	68	1942	12	79
1928	13	71	1943	21	92
1929	25	73	1944	21	85
1930	18	43	1945	19	71
1931	15	76	1946	22	94
1932	15	94	1947	19	97
1933	19	91	1948	19	107
1934	6	70	1949	27	133
1935	29	66			

The increase in recent years has been entirely confined to females. In 1921–25 deaths of male centenarians averaged 21 per year and of females 61 per year, there being thus 2·9 deaths of females to each death of a male centenarian. In 1945–49 on the other hand deaths of males averaged 21 and of females 100 per year giving a sex ratio of 4·8.

Mortality according to Marital Condition

Tables 19 and 19A (Part I) give numbers of deaths by sex, age and marital condition, and Table XXXVI compares the death rates of single, married, widowed and divorced men and women in 1930–32, 1948 and 1949.

Table XXXVI.—Death rates from All Causes, of Single, Married and Widowed Males over 45 years of age and Females over 20, per 1,000 living at quinquennial groups of ages, 1930–32, 1948 and 1949.

Sex and age	1930–32			1948			1949		
	Single	Married	Widowed and Divorced	Single	Married	Widowed and Divorced	Single	Married	Widowed and Divorced
Males									
45– ..				8·99	6·21	8·70	9·48	6·16	8·65
50– ..				13·3	9·83	13·7	13·9	10·0	15·1
55–				19·3	16·2	21·5	19·4	17·0	21·8
60– ..				30·9	25·8	34·5	31·4	27·4	36·1
65– ..				43·2	38·4	45·7	46·1	41·2	49·7
70– ..				57·9	57·2	72·8	66·3	62·9	77·6
75 and over				111·3	105·7	136·6	122·8	116·6	158·2
Females									
20– ..	2·7	3·0	4·3	1·76	1·30	*2·33*	1·67	1·14	*1·83*
25– ..	3·2	3·0	4·1	2·22	1·54	2·92	1·89	1·43	2·44
30– ..	3·6	3·2	4·6	2·69	1·62	2·17	2·78	1·58	1·92
35– ..	4·1	3·9	4·7	2·91	1·90	2·70	3·09	1·97	2·27
40– ..	5·5	4·7	5·5	3·81	2·60	3·31	3·97	2·58	3·34
45– ..	7·5	6·4	8·0	4·97	4·07	4·72	4·92	4·15	4·91
50– ..	9·9	9·1	11·0	7·71	6·09	7·73	7·69	6·07	8·23
55– ..	14·3	13·4	15·3	9·99	9·02	11·0	10·8	9·37	11·7
60– ..	20·4	20·7	23·4	14·3	14·9	16·2	15·2	15·7	16·9
65– ..	31·0	32·5	36·5	22·3	23·4	26·7	24·4	25·3	29·2
70– ..	50·7	52·4	59·2	39·6	40·9	43·8	43·0	44·6	50·0
75 and over	122·8	99·2	137·5	94·6	67·8	112·2	110·2	78·2	127·9

Similar comparisons were made in the Review for 1946–47, and, for women only, in the Reviews for 1923 and 1933, where the factors responsible for the variations in mortality in different classes of women were fully discussed, the most important of these factors being physical selection for marriage or for re-marriage, difference of average age within individual age groups, the risks of child-bearing, and differences in economic, environmental and other circumstances between the different groups.

The table below gives the percentage excess or deficit of mortality of single and of widowed and divorced women over married women. Whereas in 1920–22 single women under 40, despite the influence of physical selection, had a favourable mortality experience compared with married women, the reduction in the birth rates and in the risks of child-bearing have completely altered this relationship in recent years and married women at child-bearing ages now have much lower death rates than single women. For the same reason relative differences in the mortality of the widowed and divorced compared with married women at these ages have increased.

Condition	Period	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75 & over
Single ..	1920–22	−16	−8	−2	−4	9	15	13	7	—	−1	—	23
	1930–32	−10	7	13	5	17	17	9	7	−1	−5	−3	24
	1946–49	32	41	65	47	41	20	23	15	3	−2	−1	39
Widowed and Divorced	1920–22	14	5	7	6	23	28	28	23	20	11	18	39
	1930–32	43	37	44	21	17	25	21	14	13	12	13	39
	1946–49		94	55	29	29	28	23	19	13	8	11	57

The relationships between marriage, fertility, and mortality from cancer of certain sites are discussed on page 164.

STATISTICS OF CAUSES OF DEATH AND NOTIFIABLE DISEASES

Causes of Death

Recent trends of mortality from separate causes are given in the following tables in Part I: Table 6, Numbers of deaths; Table 7, Crude death rates; Table 8, Comparative Mortality Indices. C.M.I's. and death rates under 15 from the principal epidemic and other diseases since 1851 are given in Table 9. Deaths from selected causes in local areas, 1948 and 1949, are shown in Tables 10 and 24. Causes of infant mortality are given in Tables 11, 12, 13A and 15; deaths of children under 5 in Table 22; and deaths at separate ages from 0 to 85 and over in Tables 21 and 21A. Deaths from individual causes by month of occurrence are shown in Table 23 and deaths from violent causes in Table 25. Mortality from ten selected causes in England and Wales and in Scotland are compared in Appendix A (Part I).

Table XXXVII lists causes of death from which mortality, as measured by the C.M.I., was 5 per cent. or more higher in 1949 than in 1938.

The largest increases were recorded in respect of poliomyelitis, coronary disease, cancer of the respiratory system, diseases of liver (except cirrhosis), leukæmia, and cancer of the brain, the order and magnitude of the increases from each cause differing to a slight extent between the sexes. These and other changes in mortality are discussed under the appropriate titles in subsequent sections of this volume.

Table XXXVII.—Important diseases from which mortality has increased by 5 per cent. or more, between 1938 and 1949.

(Based on Comparative Mortality Indices)

Males			Females		
Int. List No.	Causes of Death	Increase per cent. of 1938	Int. List No.	Causes of Death	Increase per cent of 1938
36	Acute poliomyelitis and polioencephalitis ..	161	36	Acute poliomyelitis and polioencephalitis ..	139
94	Diseases of the coronary arteries, angina pectoris	124	94	Diseases of the coronary arteries, angina pectoris	131
47	Cancer of the respiratory system..	98	125	Other diseases of the liver	79
74	Leukæmias and aleukæmias	49	74	Leukæmias and aleukæmias	51
54	Cancer of the brain and other parts of the nervous system ..	40	47	Cancer of the respiratory system..	44
125	Other diseases of the liver	39	54	Cancer of the brain and other parts of the nervous system ..	33
106(*b*)	Chronic bronchitis ..	31	114 a, e:1	Silicosis, other occupational pneumoconioses and chronic interstitial pneumonia	27
114 a, e:1	Silicosis, other occupational pneumoconioses and chronic interstitial pneumonia	29	100	Diseases of the veins ..	24
52	Cancer of the urinary organs	26	52	Cancer of the urinary organs	22
44(*b*)	Pernicious lymphogranulomatosis (Hodgkin's disease)	22	33	Influenza	18
50	Cancer of the breast ..	19	97	Arteriosclerosis	16
100	Diseases of the veins ..	17	117(*b*)	Ulcer of the duodenum	12
117(*b*)	Ulcer of the duodenum ..	16	87c	Paralysis agitans ..	11
51	Cancer of the male genital organs	14	83	Intra-cranial lesions of vascular origin ..	6
112	Asthma	7	106(*b*)	Chronic bronchitis ..	6
			49	Cancer of other female genital organs ..	5

Notifications of Infectious Diseases

Details of annual notifications of infectious diseases that are statutorily notifiable throughout the country are given in Tables 26 to 29 of Part I. " Original " notifications are those made to the local Medical Officers of Health, and a return of these is sent each week to the Registrar General for publication in the Weekly Return. At the end of each quarter the Medical Officers of Health submit a consolidated return for the quarter indicating the number of " final " notifications of each disease after revision of diagnosis either by the notifying practitioner or the infectious diseases hospital, with details of sex and age distribution.

The ratios of final to original notifications for six infectious diseases in 1946–47, 1948 and 1949 are shown in Table XXXVIII by main regions and density aggregates. The disease most affected by correction of diagnosis is diphtheria, and the ratio has been diminishing rapidly each year, from an average of 0·75 in 1944–45 to 0·38 in 1949 for the country as a whole. As in previous years correction of diagnosis, for each disease, has taken place more often in urban than in rural areas.

Table XXXVIII.—Ratios of Final to Original Notifications of six Infectious Diseases in Regions and Density Aggregates. 1946–47, 1948 and 1949.

		Greater London	Rest of South East	North	Midland	East	South West	Wales	County* Boroughs	Other Urban* Districts	Rural* Districts	England and Wales
Typhoid fever	1946–47	0·69	0·85	0·71	0·73	0·95	0·79	0·91	0·66	0·85	0·90	0·78
	1948	0·65	0·89	0·58	0·94	0·90	0·76	0·86	0·55	0·84	0·93	0·78
	1949	0·71	1·01	0·69	0·65	0·67	0·63	0·75	0·66	0·75	0·92	0·76
Paratyphoid fever ..	1946–47	0·78	0·97	0·90	0·81	0·98	0·78	1·01	0·90	0·92	0·91	0·90
	1948	0·81	0·88	0·74	0·82	0·92	0·90	0·80	0·79	0·84	0·87	0·82
	1949	0·83	0·99	0·71	0·88	0·53	0·75	1·00	0·71	0·81	0·86	0·77
Cerebro-spinal fever ..	1946–47	0·73	0·87	0·74	0·61	0·88	0·83	0·75	0·66	0·81	0·80	0·73
	1948	0·64	0·86	0·60	0·46	0·62	0·67	0·65	0·49	0·75	0·71	0·60
	1949	0·58	0·88	0·58	0·50	0·63	0·78	0·47	0·49	0·73	0·70	0·58
Diphtheria	1946–47	0·53	0·83	0·59	0·59	0·79	0·68	0·68	0·52	0·74	0·74	0·61
	1948	0·38	0·73	0·43	0·43	0·76	0·58	0·36	0·37	0·57	0·58	0·44
	1949	0·33	0·74	0·36	0·39	0·57	0·44	0·37	0·32	0·49	0·50	0·38
Dysentery	1946–47	0·87	0·97	0·92	0·95	0·95	0·98	0·93	0·88	0·97	0·98	0·93
	1948	0·90	0·98	0·92	0·97	0·99	0·94	0·89	0·89	0·98	0·99	0·93
	1949	0·85	0·98	0·93	0·95	0·99	0·99	0·96	0·92	0·95	1·00	0·93
Acute poliomyelitis and polioencephalitis.	1946–47	0·77	0·93	0·84	0·82	0·88	0·91	0·84	0·78	0·90	0·91	0·84
	1948	0·83	0·88	0·76	0·80	0·94	0·86	0·85	0·77	0·84	0·88	0·82
	1949	0·81	0·94	0·83	0·83	0·88	0·93	0·86	0·82	0·90	0·91	0·86

* Excluding Greater London.

1 and 2. Typhoid and Paratyphoid fevers.—Notifications and deaths from these diseases since 1944 are shown below, non-civilians being included :—

	Typhoid fever		Paratyphoid fever	
	Final Notifications*	Deaths	Final Notifications*	Deaths
1944	275	44	258	10
1945	287	32	231	15
1946	479	38	730	16
1947	275	29	412	5
1948	348	38	373	10
1949	280	19	579	13

* Corrected by revision of diagnosis.

The total of deaths from typhoid and paratyphoid fever was 5,071 in 1901, 613 in 1921, 112 in 1939, and 32 in 1949, crude death rates in each of these years being 155, 16, 3, and 1 per million. Though mortality has become low compared with earlier years there has been no progressive reduction in the numbers of

notified cases of typhoid and of paratyphoid fever since 1944, any real reduction in incidence being possibly offset by more complete detection and notification of cases. The figure of 19 deaths from typhoid fever in 1949, however, is the lowest yet recorded, yielding a fatality rate (deaths per 1,000 final notifications) of 68 compared with 109 in 1948 and an average of 109 during 1944–47. Some of the reduction in fatality in 1949 must be attributed to the experimental introduction in that year of chloramphenicol in the treatment of typhoid fever. The fatality rate of paratyphoid fever was 27 in 1948 and 22 in 1949.

Table XXXIX.—Typhoid and Paratyphoid Fevers : Prevalence and Fatality in Regions. 1946 to 1949 (Civilians).

Area	Typhoid fever				Paratyphoid fever			
	1946	1947	1948	1949	1946	1947	1948	1949
	Notified cases† per million living				Notified cases† per million living			
England and Wales	**11**	**6**	**8**	**6**	**18**	**9**	**9**	**13**
Regional Summary:								
South East	7	7	5	9	10	13	11	10
Greater London	7	6	5	6	7	6	8	9
Remainder of South East	7	7	4	12	15	22	15	11
North	8	6	5	8	31	8	6	26
North I	5	5	6	6	13	16	9	42
North II	4	5	2	3	10	5	3	20
North III	7	7	6	2	91	11	8	4
North IV	10	6	5	13	9	5	4	34
Midland	8	5	19	5	10	5	9	7
Midland I	9	4	26	4	14	5	6	7
Midland II	7	7	6	7	2	5	14	7
East	4	17	9	1	4	22	17	4
South West	6	1	7	2	11	4	4	4
Wales	73	5	9	1	29	4	5	4
Wales I	18	5	7	1	37	2	3	2
Wales II	211	6	17	1	9	8	10	7
Density Summary :								
County boroughs*	7	6	4	5	28	7	10	20
Other urban districts*	16	6	7	6	18	11	7	13
Rural districts*	15	8	20	10	10	14	9	8
	Deaths per thousand cases notified†				Deaths per thousand cases notified†			
England and Wales	**76**	**95**	**110**	**68**	**22**	**10**	**27**	**23**
Greater London	105	135	143	63	36	—	43	14
County boroughs*	76	96	275	116	11	—	30	23
Other urban districts*	80	118	109	76	33	14	21	29
Rural districts*	55	32	50	24	26	18	14	15

* Excluding Greater London. † Fully corrected for diagnosis revision.

The notification rate of typhoid fever in 1948 was high in the Midland I region (Table XXXIX) with 26 cases notified per million population, a hospital outbreak having occurred in Shropshire. In 1948 and 1949 the ratio of deaths to notified cases was highest in the county boroughs and lowest in the rural districts. Paratyphoid fever was particularly prevalent in 1949 in the North I and North IV regions where localised outbreaks occurred. The fatality rate of paratyphoid fever was highest in Greater London in 1948 and in the urban districts in 1949, but in recent years these fatality rates have tended to fluctuate within wide limits ranging for instance between 133 deaths per 1,000 notifications in the rural districts in 1945 to no deaths in Greater London and the county boroughs in 1947.

Notification and fatality rates by sex and age from 1946 to 1949 are given in Table XL.

Table XL.—Typhoid and Paratyphoid Fevers. Corrected Notification and Fatality Rates by Sex and Age (Civilians). 1946 to 1949.

	Typhoid fever				Paratyphoid fever			
	0–	15–	45 and over	All ages	0–	15–	45 and over	All ages
	Notifications (corrected) per million living							
Males								
1946 ..	19	10	4	**10**	45	11	5	**17**
1947 ..	8	9	3	**7**	18	9	3	**9**
1948 ..	9	7	3	**6**	17	6	3	**7**
1949 ..	7	8	6	**7**	29	10	3	**12**
Females								
1946 ..	16	13	9	**12**	48	15	7	**19**
1947 ..	6	7	5	**6**	16	10	6	**10**
1948 ..	8	15	5	**10**	23	8	5	**10**
1949 ..	7	6	5	**6**	31	15	5	**15**
	Deaths per 1,000 notifications (corrected)							
Persons								
1946 ..	19	69	175	**76**	5	13	128	**22**
1947 ..	30	92	175	**95**	—	—	60	**10**
1948 ..	76	104	169	**110**	—	—	179	**27**
1949 ..	58	39	125	**68**	14	26	49	**23**

6. Cerebro-spinal (Meningococcal) Meningitis.—Notifications and deaths from this cause since 1944 have been as follows :—

	1944	1945	1946	1947	1948	1949
Final notifications*	2,306	2,060	2,010	2,282	1,216	942
Deaths**	592	555	509	534	300	288
Deaths per 1,000 notifications ..	257	269	253	234	247	306

* Including non-civilians, and excluding Port Health Districts.

** Including non-civilians.

This disease is liable to periodic epidemic fluctuations, and since 1911 relatively high mortality has been recorded during 1915–17, 1931–33, and 1940–42. Since 1944 numbers of deaths and of notifications have fallen rapidly, and the comparative mortality index, 0·374 in 1949, has only once been lower, 0·373 in 1923.

The ratio of deaths to final notifications has shown no tendency to decline in the past six years, but as the proportion of confirmed diagnoses among cases originally notified as cerebro-spinal fever has been diminishing during this period (Table XXXVIII Page 68) some continued reduction in fatality may have occurred though it cannot be large. In comparison with the pre-sulphonamide period however, improvement in fatality has been very great, declining from over 600 deaths per 1,000 original notifications in 1931–35 to about 260 per 1,000 in 1945–49.

Table XLI.—Cerebro-spinal Fever: Mortality at Various Ages per Million Living.† 1911 to 1949.

(Ages last Birthday.)

Year	Males					Females				
	C.M.I.	0–	5–	15–	25–64*	C.M.I.	0–	5–	15–	25–64*
1911–14	0·448	64·6	11·9	5·8	1·8	0·513	55·0	8·9	4·1	1·6
1915–17	1·613	149·8	45·7	136·2	13·2	1·827	123·0	36·5	24·8	10·7
1918–20	0·857	90·0	23·8	44·2	5·7	0·910	68·7	18·9	12·1	3·8
1921–25	0·442	60·0	11·2	7·4	2·1	0·498	48·4	9·1	5·5	1·6
1926–30	0·705	98·0	15·9	11·9	3·5	0·720	72·7	12·4	6·1	2·4
1931	2·184	220·2	51·6	54·5	16·5	2·094	172·6	45·8	17·4	9·8
1932	1·830	211·0	36·3	42·9	12·8	1·818	153·0	31·5	16·3	9·3
1933	1·370	174·1	26·9	28·7	8·3	1·535	139·5	27·6	12·9	6·6
1934	1·138	136·2	24·0	22·2	8·0	1·123	107·3	17·9	7·7	5·4
1935	0·912	119·6	18·6	14·3	6·5	1·022	104·6	16·0	8·6	3·8
1936	0·981	135·6	17·2	17·7	6·6	0·990	106·2	16·5	7·2	3·2
1937	1·024	142·9	15·6	21·8	6·5	1·159	132·2	11·9	9·3	4·8
1938	1·000	127·7	15·6	18·5	8·9	1·000	104·3	17·6	6·9	3·5
1939	0·742	93·8	11·2	16·5	6·0	0·805	77·0	11·0	5·8	4·5
1940	3·762	385·3	67·4	77·4	41·6	4·076	297·5	55·8	42·7	27·6
1941	3·280	325·7	58·7	53·4	36·7	3·609	248·4	49·0	30·1	27·4
1942	1·788	195·9	34·6	28·0	17·7	2·000	165·0	26·4	15·1	12·8
1943	1·236	150·9	18·1	24·9	11·3	1·171	99·3	20·0	10·7	6·5
1944	0·904	126·5	12·6	12·6	8·5	0·879	80·6	11·5	6·3	5·4
1945	0·838	113·8	10·2	15·5	7·2	0·786	81·2	9·7	5·4	3·9
1946	0·644	93·4	11·4	9·2	4·9	0·805	76·6	9·5	5·3	4·7
1947	0·648	103·5	9·5	8·7	4·0	0·766	78·1	8·4	4·1	4·6
1948	0·349	55·0	4·5	2·8	2·8	0·436	51·1	5·4	3·1	1·3
1949	0·342	61·1	3·4	2·8	1·6	0·435	47·7	4·6	2·1	1·9

* Equivalent average rate.

† Corrected to 1940 classification in years 1911–1939.
Civilian mortality only 1915–1920, and from 3rd September, 1939, for males and from 1st June, 1941, for females.

As in previous years mortality in 1948 and 1949 was much higher at ages under 5 than at later ages (Table XLI) with, as usual, boys at a considerable disadvantage. Contrary to previous experience, girls aged 5–14 had a higher mortality than boys in 1948 and 1949, and this reversal of the usual sex ratio also occurred in 1948 at ages 15–24 and in 1949 at 25–64. At all ages, the mortality of males in 1949, as measured by the C.M.I. declined to 34 per cent. of the rate in 1938, that of females to 44 per cent.

Table XLII.—Cerebro-spinal Fever : Notification and Fatality Rates in 1931 to 1949, with distinction of Non-civilians from 1939.

Year	Notifications per million living	Deaths* per 1,000 notifications	Year	Number of notifications		Rate per million civilians	Deaths per 1,000 notifications	
				Civilians	Non-civilians		Civilians	Non-civilians
1931 ..	55	652	1939	1,414	86	34	356	163
1932 ..	53	570	1940	11,185	1,586	280	220	79
1933 ..	42	558	1941	9,893	1,184	255	209	83
1934 ..	27	669	1942	5,286	743	138	216	85
1935 ..	22	701	1943	2,976	327	79	251	104
1936 ..	24	642	1944(1)	2,684	298	71	212	74
1937 ..	28	615	(2)	2,018	288	53	282	76
1938 ..	31	509	1945(1)	2,491	248	65	212	113
			(2)	1,829	231	48	288	121
			1946(1)	2,539	134	63	193	149
			(2)	1,880	130	46	260	154
			1947(1)	3,056	90	73	171	122
			(2)	2,196	86	53	238	128
			1948(1)	2,004	20	47	148	200
			(2)	1,198	18	28	247	222
			1949(1)	1,611	8	37	178	125
			(2)	934	8	22	307	125

* Corrected to 1940 classification.
(1) Original notification.
(2) Fully corrected for diagnosis revision (excluding Port Health Districts).

Table XLIII.—Cerebro-spinal Fever : Prevalence and Fatality in Regions and different classes of Area. 1946 to 1949 (Civilians).

	Notified cases† per million (excluding non-civilians)				Deaths per 1,000 cases notified†			
	1946	1947	1948	1949	1946	1947	1948	1949
England and Wales	**46**	**53**	**28**	**22**	**260**	**238**	**247**	**307**
Regional Summary :								
South East	44	46	23	17	263	249	265	289
Greater London ..	48	49	27	19	277	258	284	277
Remainder of South East	40	42	18	16	242	236	229	307
North	50	60	37	28	268	234	229	314
North I	67	92	58	40	234	199	138	264
North II	54	54	24	16	279	229	219	381
North III	50	61	36	25	260	266	262	297
North IV	42	48	33	27	290	235	268	341
Midland	49	55	26	24	212	236	227	260
Midland I..	49	64	26	28	209	206	216	226
Midland II	50	38	27	17	219	337	247	370
East	33	41	12	13	383	312	304	360
South West	39	47	17	14	229	202	436	531
Wales	47	60	36	21	310	205	228	358
Wales I	54	68	40	24	219	180	203	333
Wales II	29	41	25	11	750	310	333	500
Density Summary :								
County boroughs*	57	68	37	31	233	204	235	295
Other urban districts* ..	40	48	26	20	279	266	246	294
Rural districts*	38	39	19	13	271	251	233	430

* Excluding Greater London. † Fully corrected for diagnosis revision.

Table XLIII compares regional prevalence and fatality rates. Prevalence in 1948–49 was again highest in the North I region, as it has been each year since 1943, though the low fatality rate recorded in this area suggests the possibility of some relative over-notification of cases or under-correction of diagnosis. Prevalence was again highest in the county boroughs and lowest in the rural districts.

Table XLIV.—Cerebro-spinal Fever : Corrected Notification and Fatality Rates by Sex and Age. 1948 and 1949.

Age (*last birthday*)	Notifications* per million living				Deaths per 1,000 notifications*			
	1948		1949		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
Civilians								
0– ..	175	144	155	104	314	355	395	457
5– ..	56	43	44	35	80	125	77	131
15– ..	16	11	10	8	151	184	194	306
45– ..	8	6	5	4	405	171	292	318
65 and over	2	3	3	2	1,750	71	500	833
All Ages ..	**33**	**23**	**27**	**172**	**236**	**261**	**282**	**344**
Non-civilians	18†	—	8†	—	222	—	125	—

* Fully corrected for diagnosis revision.

† Numbers of notifications in England and Wales.

Notification and fatality rates by sex and age are shown in Table XLIV. At ages under 5, cerebro-spinal fever, as judged by the ratio of deaths to notification, continued in 1948 and 1949 to be a serious disease, with at least one death registered to every three cases notified. At ages over 65 where deaths are few and notifications grossly incomplete the fatality rates are subject to wide fluctuations.

8. Scarlet fever.—Notifications, deaths, and fatality rates of scarlet fever since 1944 are shown in the table below :—

	1944	1945	1946	1947	1948	1949
Final notifications*	92,582	73,622	56,701	58,027	74,824	70,646
Deaths†	107	84	43	42	37	18
Fatality rate‡	1·2	1·1	0·8	0·7	0·5	0·3

* Excluding Port Health Districts.

† Including non-civilians.

‡ Deaths per 1,000 final notifications.

Table XLV.—Scarlet Fever : Corrected Notification Rates in Regions and different classes of Area at Ages 0–4, 5–14 in 1946 to 1949. Fatality at All Ages, 1940–1949.

Area	Notifications† per 100,000 living at								Deaths per 1,000 cases notified at all ages (civilians only)					
	Ages 0–4 (l.b.d.)				Ages 5–14 (l.b.d.)									
	1946	1947	1948	1949	1946	1947	1948	1949	1940–41‡	1942–43‡	1944–45†	1946–47†	1948†	1949†
England and Wales	**410**	**362**	**538**	**580**	**647**	**658**	**839**	**770**	**2·4**	**1·2**	**1·1**	**0·7**	**0·5**	**0·3**
Regional Summary :														
South East	382	308	387	480	633	590	617	729	1·8	0·9	0·9	0·6	0·7	0·1
Greater London	454	397	483	577	768	742	773	870	1·3	0·7	0·9	0·5	0·7	0·1
Remainder of South East	293	194	265	358	473	417	439	567	2·1	1·3	0·8	0·8	0·7	0·3
North	471	455	727	749	702	787	1,081	873	2·5	1·0	1·0	0·8	0·4	0·4
North I	388	368	554	461	591	717	1,035	608	4·2	1·0	1·0	1·8	0·4	0·3
North II	402	435	481	400	631	845	644	513	2·5	0·5	1·1	0·7	0·5	0·6
North III	524	506	924	928	719	829	1,225	973	2·2	0·8	0·9	0·4	0·1	0·6
North IV	486	463	734	833	753	777	1,121	1,004	2·3	1·3	1·0	0·7	0·5	0·2
Midland	407	385	557	587	667	714	907	797	2·6	1·8	1·6	0·7	0·3	0·3
Midland I	392	387	555	524	654	758	919	693	3·0	2·1	1·6	0·5	0·4	0·1
Midland II	437	382	561	715	694	624	881	1,011	1·9	1·1	1·6	1·2	0·2	0·5
East	243	205	424	410	425	371	641	676	2·9	1·6	1·1	1·2	0·8	0·4
South West	245	144	207	308	456	325	426	447	2·2	1·8	2·0	0·8	0·6	—
Wales	521	401	709	587	679	658	1,016	705	3·0	1·4	1·4	0·5	1·1	—
Wales I	613	485	841	658	769	778	1,231	814	3·2	1·0	1·0	0·2	1·0	—
Wales II	272	174	353	391	443	345	465	419	2·4	2·7	2·8	2·5	1·4	—
Density Summary :														
County boroughs*	470	438	691	683	683	764	1,004	808	2·3	1·0	0·9	0·5	0·4	0·3
Other urban districts*	393	338	532	594	623	626	843	779	2·6	1·4	1·2	1·0	0·4	0·3
Rural districts*	294	235	345	386	519	466	628	603	2·7	1·9	1·7	1·0	1·0	0·3

* Excluding Greater London. † Fully corrected for diagnosis revision. ‡ Adjusted to allow for diagnosis revision.

The totals of 37 deaths in 1948 and 18 deaths in 1949 contrast in startling fashion with 4,339 in 1901, 1,305 in 1921 and annual averages of 347 in 1935–39, and 119 in 1940–45. This enormous reduction in mortality has not been paralleled by a corresponding reduction in the incidence of notified cases ; there has, however, been some reduction of these during 1945–49. Periods of low, as of high, prevalence are characteristic features of scarlet fever and it should not be supposed that a permanent reduction in the incidence of cases of the disease has come about. Indeed, there can be no assurance that even the trend of mortality may not reverse at some time in the future though with the resources of chemotherapy and of antibiotic therapy now available it seems unlikely that scarlet fever can ever again become a major cause of death.

An increase of notifications in 1948 was recorded in all parts of the country (Table XLV), with high rates at ages under 5 and 5–14 in the North III and Wales I regions. In 1949 the highest rates at 5–14 were in the Midland II and North IV regions, followed by North III. As usual, the notification rates were higher in urban than rural districts, and higher in the county boroughs. With only a score of deaths now attributed annually to scarlet fever little significance can be attached to the regional variations in fatality shown in Table XLV.

Notification fatality rates by sex and age from 1946 to 1949 are given in Table XLVI.

Table XLVI.—Scarlet Fever : Corrected Notification and Fatality Rates by Sex and Age. 1946 to 1949. (Civilians only).

Ages (l.b.d.)	1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
	Notifications* per 100,000 living							
0–	42	34	25	24	36	32	33	30
1–	321	290	278	262	368	346	394	340
3–	735	746	708	694	1,044	1,042	1,159	1,130
5–	789	932	786	970	1,109	1,283	1,132	1,282
10–	353	499	344	545	376	566	254	368
15 and over	19	25	19	25	18	22	11	13
All ages ..	**138**	**138**	**131**	**142**	**170**	**176**	**165**	**161**
	Deaths per 1,000 notifications*							
0–	6·6	—	17·9	9·6	6·9	8·1	—	—
1–	0·5	1·6	1·0	2·3	—	0·4	0·3	0·4
3–	0·2	0·7	0·6	0·9	0·1	0·1	—	—
5–	0·7	0·5	0·4	0·2	0·2	0·4	0·2	0·3
10–	0·6	0·4	—	0·9	0·8	0·4	0·3	0·2
15 and over	1·5	1·6	1·8	1·4	2·1	2·0	2·3	0·4
All ages ..	**0·7**	**0·8**	**0·7**	**0·8**	**0·5**	**0·5**	**0·3**	**0·2**

* Fully corrected for diagnosis revision.

9. Whooping Cough.—Deaths from whooping cough in 1948 and 1949 numbered 748 and 527 respectively, compared with 808 and 905 in 1946 and 1947. The mean annual death rate per million children under 15 was 1,180 in 1881–85, 874 in 1901–05, 448 in 1921–25 and 140 in 1941–45 ; the rates in single years from 1946 have been 91, 99, 80, and 55, the last being by far the lowest rate yet recorded.

The C.M.I. in 1949 was 0·407 for males and 0·385 for females indicating a reduction of much more than 50 per cent. compared with 1938. Of the total deaths in 1948 and 1949, 484 and 357 respectively, about two-thirds were of children under 12 months of age. The sex and age distribution of the deaths registered in 1949 were as follows :—

Sex	All Ages	Under 4 weeks	4 weeks to 3 months	Months				Years				
				3–	6–11	1–	2–	3–	4–	5–	10–	15 and over
M. ..	238	4	47	66	62	29	11	7	3	9	—	—
F. ..	289	5	43	53	77	59	31	9	6	4	—	2*

* Both aged 75–79.

Notification rates per 1,000, since 1940, when compulsory notification was introduced, are shown below (fully corrected for revision of diagnosis since 1944) :—

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
1·34	4·47	1·73	2·54	2·49	1·64	2·29	2·22	3·42	2·39

At ages 0–4 the rate per 1,000 increased from 17 in 1947 to 27 in 1948, returning to 19 in 1949. A similar temporary increase in 1948 took place at ages 5–14. In 1948 the highest weekly numbers of cases were notified during the second half of April, but fairly high prevalence continued throughout the summer. In 1949 the highest incidence was during January, February and March, with some continuation until May.

The regional distributions shown in Table XLVII indicate that prevalence was high generally in all areas in 1948 compared with the two preceding years. Mortality at ages under 5 in 1948 was highest in the North III region and Wales I. Once again the correlation at ages under 5 between notification and death rates and urbanisation was evident.

Notification rates and fatality rates (deaths per 1,000 corrected notifications) are given in Table XLVIII for various ages. As in previous years the notification rate at each age in 1948 and 1949 was higher for females than for males, although, owing to the relative excess of women at ages when whooping cough rarely occurs, the notification rate for all ages combined was the same for each sex.

Table XLVII.—Whooping Cough : Notification Rates at Ages 0–4, and 5–14, Death Rates and Fatality Rates in Regions and different classes of Area. 1946 to 1949.

Area	Notifications† per 1,000 living at								Deaths at ages 0–4 (l.b.d.)							
	Ages 0–4 (l.b.d.)				Ages 5–14 (l.b.d.)				Per million living				Per 1,000 notifications†			
	1946	1947	1948	1949	1946	1947	1948	1949	1946	1947	1948	1949	1946	1947	1948	1949
England and Wales	**19**	**17**	**27**	**19**	**5**	**5**	**8**	**6**	**242**	**245**	**202**	**138**	**12**	**14**	**7**	**7**
Regional Summary :																
South East	17	19	26	15	5	6	9	5	170	210	161	73	10	11	6	5
Greater London	19	22	28	16	5	7	9	5	166	244	180	79	9	11	6	5
Remainder of South East	14	16	24	15	5	6	9	5	175	166	137	64	13	11	6	4
North	24	17	29	22	5	4	7	5	324	296	221	204	14	17	8	9
North I	24	18	27	22	5	4	6	5	307	325	183	173	13	18	7	8
North II	22	11	26	22	6	3	8	7	305	137	134	165	14	13	5	8
North III	27	19	32	18	6	4	7	5	302	271	271	107	11	14	8	6
North IV	22	17	28	24	5	5	7	5	348	334	225	279	16	19	8	12
Midland	22	17	28	21	6	5	8	6	240	239	237	160	11	14	8	8
Midland I	23	18	29	22	6	5	8	6	252	247	243	176	11	14	8	8
Midland II	20	15	27	19	6	4	8	6	216	223	225	130	11	15	8	7
East	14	14	27	16	6	6	10	6	231	198	224	75	16	14	8	5
South West	15	17	25	18	6	7	10	7	185	206	158	145	12	12	6	8
Wales	11	11	20	15	2	3	5	4	279	275	237	135	25	25	12	9
Wales I	12	10	21	16	2	2	4	4	313	250	266	133	26	24	13	8
Wales II	10	12	19	12	3	4	6	4	188	340	158	140	19	29	8	12
Density Summary :																
County boroughs*	24	19	30	23	5	5	7	6	313	301	234	208	13	16	8	9
Other urban districts*	18	16	26	18	5	5	7	5	231	220	197	121	13	14	8	7
Rural districts*	15	13	24	15	6	6	10	6	219	196	175	110	15	15	7	7

* Excluding Greater London.

† Fully corrected for diagnosis revision.

Table XLVIII.—Whooping Cough : Corrected Notification and Fatality Rates by Sex and Age. 1946 to 1949. (Civilians only).

Ages (l.b.d.)	1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
	Notifications* per 1,000 living							
0–	12·8	14·1	12·2	13·2	18·3	20·0	12·9	13·8
1–	18·5	20·8	16·8	19·1	25·3	27·9	17·3	19·5
3–	21·0	24·7	18·9	22·6	29·5	34·8	20·2	24·0
5–	8·6	10·0	9·0	10·3	14·0	16·0	9·4	11·0
10–	0·6	0·8	0·6	0·7	0·8	1·0	0·6	0·8
15 and over	0·0	0·1	0·0	0·1	0·0	0·1	0·0	0·1
**All ages .. **	**2·4**	**2·2**	**2·2**	**2·2**	**3·4**	**3·4**	**2·4**	**2·4**
	Deaths per 1,000 notifications*							
0–	52·4	56·1	46·9	54·9	31·5	33·0	37·1	36·1
1–	6·7	10·3	9·8	12·8	4·0	6·6	2·8	5·8
3–	1·7	2·1	1·2	2·2	1·0	0·6	0·7	1·0
5–	0·2	0·6	0·2	1·3	0·1	0·2	0·6	0·3
10–	1·2	1·0	—	—	—	—	—	—
15 and over	3·0	3·4	—	2·0	3·5	1·9	—	1·8
**All ages .. **	**8·1**	**9·3**	**8·8**	**10·6**	**4·8**	**5·4**	**4·9**	**5·3**

* Fully corrected for diagnosis revision.

The notified incidence of whooping cough in each sex was highest at ages 3 and 4, followed closely by ages 1 and 2. The rate for children under 1 was slightly higher than at 5–9. These sex and age differences are very stable and are repeated every year.

The fatality rate was very much higher in infancy than at later ages. In 1949, the rate for male infants 37·1, exceeded that for females, 36·1, a departure from the usual sex ratio. The fatality rate at " all ages," however, in 1948 and 1949 was, as usual, higher for females than for males.

10. Diphtheria.—The rapid downward trends in numbers of cases notified and of deaths registered from diphtheria since 1941 continued during 1948 and 1949 when 3,560 and 1,881 cases were notified, after correction by revision of the diagnosis, with 156 and 84 deaths respectively. Annual corrected notifications, deaths, and fatality rates (deaths per 1,000 notifications) since 1944 are shown in the table below, non-civilians being included.

	1944	1945	1946	1947	1948	1949
Notifications	23,152	18,571	11,967	5,592	3,560	1,881
Deaths	934	722	472	244	156	84
Deaths per 1,000 notifications ..	40	39	39	44	44	45

The crude death rate per million (all ages) was 67 in 1931, rose to 101 in 1934, returned to 52 in 1939 and was 68 in 1941. Since then it has diminished rapidly, to 36 in 1943, 18 in 1945, 4 in 1948 and 2 in 1949 (Table 7, Part I). The comparative mortality indices for 1949, 0·028 for males and 0·024 for females, indicate a level of mortality from diphtheria one-fortieth of what it was in 1938 (Table 8).

Table XLIX.—Diphtheria : Corrected Notification Rates in Regions and different classes of Area at Ages 0–4, 5–14 in each year 1946 to 1949. Fatality at All Ages, 1940–1949.

Area	Notifications† per 100,000 living								Deaths per 1,000 cases notified at all ages					
	Ages 0–4 (l.b.d.)				Ages 5–14 (l.b.d.)									
	1946	1947	1948	1949	1946	1947	1948	1949	1940–41‡	1942–43‡	1944–45†	1946–47†	1948†	1949†
England and Wales	**73**	**37**	**23**	**13**	**102**	**44**	**29**	**15**	**67**	**54**	**40**	**41**	**44**	**45**
Regional Summary :														
South East	47	27	15	7	59	27	18	10	68	58	51	43	46	47
Greater London	59	32	21	9	75	36	24	14	68	58	44	40	52	55
Remainder of South East	32	20	8	6	41	17	11	6	64	60	63	48	32	31
North	113	51	32	20	151	65	46	22	69	53	37	36	39	43
North I	167	61	35	26	247	88	69	28	68	56	35	39	30	41
North II	63	28	28	14	99	29	24	14	75	57	43	25	65	62
North III	97	38	20	15	112	40	29	17	56	48	36	30	38	53
North IV	113	60	38	21	146	78	52	24	79	54	37	39	40	37
Midland	64	39	24	16	91	45	27	16	66	55	46	46	70	54
Midland I	80	52	30	21	101	57	35	23	70	57	44	44	55	53
Midland II	30	14	12	5	72	19	11	2	57	49	51	52	144	69
East	46	22	20	6	65	21	20	7	65	57	43	36	18	42
South West	33	24	13	6	54	22	12	5	74	69	42	70	8	58
Wales	93	36	24	9	152	62	19	13	57	43	37	41	37	10
Wales I	110	43	27	11	177	75	22	15	59	45	38	39	46	—
Wales II	47	18	16	4	87	30	10	8	54	38	35	48	—	59
Density Summary :														
County boroughs*	103	54	32	21	132	60	37	20	73	53	36	38	39	34
Other urban districts*	74	33	21	10	110	44	31	14	61	55	45	43	49	57
Rural districts*	35	21	12	7	62	27	15	8	61	51	42	43	36	45

* Excluding Greater London.

† Fully corrected for diagnosis revision.

‡ Adjusted to allow for diagnosis revision.

The death rate at ages under 15 was 1,122 per million in 1861–70 and 288 in 1931–40; it was 14 per million in 1948 and 7 per million in 1949 (Table 9). These spectacular reductions in the mortality of what was, until lately, one of the most serious infections of childhood testify to the efficacy of the national immunisation campaign and constitute one of the greatest achievements of preventive medicine in recent years.

Table L.—Diphtheria: Corrected Notification and Fatality Rates by Sex and Age (civilians) for years 1946 to 1949.

Ages (l.b.d.)	1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
	Notifications* per 100,000 living							
0–	28	18	12	8	7	5	5	3
1–	72	54	42	28	21	17	12	10
3–	118	108	64	53	40	34	21	19
5–	123	124	58	56	34	37	18	17
10–	68	90	26	38	19	25	11	13
15 and over	8	14	4	6	2	4	1	2
All ages ..	**27**	**30**	**13**	**13**	**8**	**9**	**4**	**5**
	Deaths per 1.000 notifications*							
0–	130	164	167	200	143	111	50	91
1–	93	109	72	110	120	71	61	122
3–	52	72	58	65	59	64	113	75
5–	32	40	50	50	46	62	40	28
10–	22	11	35	18	34	15	7	28
15 and over	29	29	27	18	18	20	57	19
All ages ..	**40**	**38**	**50**	**40**	**50**	**39**	**52**	**38**

* Fully corrected for diagnosis revision.

Table LI shows trends of mortality from 1906 at different ages, and the relationship of these rates to those at ages 5–9. In 1949 rates of two per 100,000 were achieved at ages 3 and 4, and one per 100,000 at ages 1, 2, and 5-9, with still lower rates at other ages. Average annual rates in 1936–38, and 1948–49, are compared below :—

Period	Ages (l.b.d.)							
	0–	1–	2–	3–	4–	5–	10–	15–24
1936–38 ..	10	21	41	53	62	46	11	1
1948–49 ..	0	1	2	2	3	2	1	0

All ages of childhood have shared in the tremendous improvement in mortality. There is now little difference between one age and another in the risk of death, and the progressive transfer of mortality from ages under 5 to ages 5–9 and 10–14, of which there was evidence between 1906 and 1939 (Table LI) has now been obscured owing to the small numbers involved at each age.

Table LI.—Diphtheria : Mortality* according to Age. 1906–1949.

Years	Ages (l.b.d.)								
	0–	1–	2–	3–	4–	5–	10–	15–	25 and over
Deaths per 100,000 living at each age (Live Births† at under 1 year).									
1906–10 ..	24	82	88	104	101	51	8	1	1
1911–15 ..	20	67	74	89	89	50	10	1	0
1916–20 ..	19	65	77	91	93	52	11	2	0
1921–25 ..	15	49	53	61	62	36	8	1	0
1926–30 ..	15	43	46	51	56	36	9	1	1
1931–35 ..	10	28	41	55	59	41	10	1	1
1936 ..	11	21	44	52	64	47	10	1	0
1937 ..	11	22	41	53	65	44	11	1	0
1938 ..	9	19	37	53	58	47	11	1	0
1939 ..	7	15	33	46	43	32	8	1	0
1940 ..	9	23	37	48	53	37	9	1	0
1941 ..	13	22	43	59	68	36	8	2	0
1942 ..	7	17	24	38	41	26	6	2	0
1943 ..	8	11	19	26	29	17	5	2	0
1944 ..	4	9	12	16	20	12	4	1	0
1945 ..	2	10	8	11	11	9	3	1	0
1946 ..	3	7	6	7	7	4	1	1	0
1947 ..	1	3	3	3	4	3	1	0	0
1948 ..	0	1	3	2	3	2	1	0	0
1949 ..	0	1	1	2	2	1	0	0	0
Rates per cent. of corresponding rate at 5–9 years.									
1906-10 ..	—	161	173	204	198	100	16	2	2
1911–15 ..	—	134	148	178	178	100	20	2	1
1916-20 ..	—	125	148	175	179	100	21	4	1
1921-25 ..	—	136	147	169	172	100	22	3	1
1926-30 ..	—	119	128	142	156	100	25	3	1
1931–35 ..	—	68	100	134	144	100	24	2	1
1936–39 ..	—	45	91	120	136	100	23	2	0
1940–44 ..	—	62	104	146	162	100	23	8	2
1945–49 ..	—	100	100	125	125	100	25	10	3

* Mortality corrected to conform with the classification in use from 1940.

† Infant mortality rates based on related live births from 1926 onwards.

Table LII.—Diphtheria : Mortality at Ages 0–4, 5–14, in Regions and different classes of Area, 1938–39, 1940–41, and each year 1946 to 1949.

Area	Deaths per million living					
	1938–39†	1940–41	1946	1947	1948	1949
			Ages 0–4			
England and Wales	**316**	**376**	**59**	**29**	**18**	**12**
Regional Summary :						
South East	181	171	34	22	7	7
Greater London	223	199	35	27	9	10
Remainder of South East	123	145	32	17	6	4
North	479	537	93	37	31	21
North I	573	551	148	46	25	25
North II	339	460	48	26	42	25
North III	356	373	52	7	17	19
North IV	542	644	106	54	40	19
Midland	294	376	51	30	20	13
Midland I	292	393	57	40	19	19
Midland II ..	300	343	38	9	21	—
East	170	188	40	18	18	—
South West	230	409	42	22	—	5
Wales	402	574	76	34	14	—
Wales I	430	659	76	40	19	—
Wales II	324	351	75	18	—	—
Density Summary :						
County boroughs*	414	599	84	33	26	17
Other urban districts* ..	343	338	63	34	17	11
Rural districts*	197	237	33	15	13	4
			Ages 5–14			
England and Wales	**243**	**221**	**29**	**18**	**12**	**4**
Regional Summary :						
South East	138	95	12	13	10	3
Greater London	146	118	18	12	15	6
Remainder of South East	126	76	6	14	3	—
North	366	311	40	21	11	3
North I	509	345	69	34	12	6
North II	219	174	10	5	10	5
North III	251	256	30	21	11	4
North IV	402	367	41	20	12	1
Midland	261	214	35	20	25	8
Midland I	239	205	35	25	29	11
Midland II	302	229	34	11	17	3
East	137	90	12	11	—	7
South West	119	288	21	21	3	—
Wales	256	331	51	26	6	3
Wales I	240	357	66	35	8	—
Wales II	300	270	10	—	—	10
Density Summary :						
County boroughs*	284	358	40	21	11	2
Other urban districts* ..	294	217	29	23	17	6
Rural districts*	188	123	20	11	3	3

* Excluding Greater London.

† Corrected to conform with the method of classification in use from 1940 onwards.

Table LII shows the trend of death rates since 1938–39 in the geographical regions and density aggregates. The great improvement in all parts of the country resulted in very few of deaths on which regional comparisons could be based in 1949, but there was still some tendency for mortality at ages under 5 to be high, as in previous years, in the North regions ; and mortality in the urban areas continued to exceed that of the rural areas. At ages 5–14 regional differences were by 1949 almost negligible, but in both 1948 and 1949 a tendency apparent in some previous years for mortality to be higher in the smaller than the larger towns became more evident. Rates in the density aggregates in 1948–49 expressed per cent. of corresponding rates in 1938–39 are shown below :—

	Ages 0–4	Ages 5–14
County boroughs	5·3	2·5
Other urban districts	4·1	4·1
Rural districts	4·6	1·6

Table LIII.—Diphtheria : Numbers of Original and Corrected Notifications and Notification Rates in 25 Large Towns and aggregates of Other Urban and Rural Areas, 1948 and 1949 (non-civilians are excluded).

Area	Number of original notifications		Number of corrected notifications		Notifications per 100,000 living			
					Original		Corrected	
	1948	1949	1948	1949	1948	1949	1948	1949
Birkenhead C.B.	212	182	105	80	151	129	75	57
Birmingham C.B.	544	455	165	138	50	41	15	12
Bolton C.B.	36	32	9	8	22	19	5	5
Bradford C.B.	17	20	17	20	6	7	6	7
Bristol C.B.	92	71	18	4	21	16	4	1
Cardiff C.B.	78	38	4	1	32	16	2	0
Coventry, C.B.	29	17	12	12	12	7	5	5
Croydon C.B.	15	3	7	2	6	1	3	1
Kingston upon Hull C.B. ..	82	38	24	2	28	13	8	1
Leeds C.B.	93	44	29	5	19	9	6	1
Leicester C.B.	65	16	32	6	23	6	11	2
Liverpool C.B.	870	568	263	129	110	71	33	16
London Admin. County ..	842	592	335	219	25	18	10	6
Manchester C.B.	181	135	43	22	26	19	6	3
Newcastle upon Tyne C.B. ..	67	52	8	4	23	18	3	1
Nottingham C.B.	44	21	10	1	15	7	3	0
Plymouth C.B.	106	66	58	30	56	35	31	16
Portsmouth C.B.	6	8	6	7	3	4	3	3
Salford C.B.	63	41	5	2	35	23	3	1
Sheffield C.B.	125	54	16	3	24	11	3	1
Southampton C.B.	13	2	11	1	7	1	6	1
Stoke on Trent C.B.	25	13	2	3	9	5	1	1
Sunderland C.B.	34	18	26	16	19	10	14	9
Swansea C.B.	4	3	2	—	3	2	1	—
West Ham C.B.	88	21	41	4	51	12	24	2
Other county boroughs ..	1,071	682	565	342	20	12	10	6
Other urban districts ..	2,459	1,322	1,304	590	14	7	7	3
Rural districts	712	446	414	223	9	6	5	3
England and Wales	**7,973**	**4,960**	**3,531**	**1,874**	**19**	**12**	**8**	**4**

Table LIII shows numbers and rates of original and corrected notifications in 25 large towns and in the density aggregates. It has already been mentioned (Page 67 and Table XXXVIII) that the proportion of original notifications of diphtheria that was subsequently confirmed was declining throughout the period 1944–1949 and was lower in the county boroughs than in other areas. In 1948 and 1949, with smaller numbers involved, there were wider variations of proportions corrected in the 25 towns than in previous years (Table LII, Text 1946–47; Table L, Text 1940–45). Thus for one final notification in 1949 there had been 21 original notifications in Nottingham and 38 in Cardiff. In contrast the numbers of original and final notifications in 1949 were the same in Bradford, and almost the same in Sunderland and Portsmouth.

Of these 25 towns, the five which have had the highest annual notification rates since 1944–45 are shown in the table below, with corrected rates per 100,000 shown in parenthesis. It will be noted that despite the general reduction in incidence the names of several towns find a place in this series with unenviable regularity :—

1944–45	1946	1947	1948	1949
Bradford (215)	Liverpool (70)	Birkenhead (54)	Birkenhead (75)	Birkenhead (57)
Salford (147)	Birkenhead (68)	Liverpool (48)	Liverpool (33)	Liverpool, Plymouth (16)
Newcastle upon Tyne (131)	Newcastle upon Tyne (66)	Sunderland, Plymouth (27)	Plymouth (31)	Birmingham (12)
Liverpool, Plymouth (107)	West Ham (60)	Coventry (22)	West Ham (24)	Sunderland (9)
	Sunderland (58)		Birmingham (15)	

11. Erysipelas.—The number of deaths assigned to this cause has undergone rapid and continuous reduction since the introduction of sulphonamide therapy in 1937. There were 51 deaths in 1948 and 54 in 1949 (Table LIV) of which only 9 were of persons under 45 years of age (Table 21, Part I). The C.M.I. of males in 1949 was 0·119 and of females 0·133 (Table 8) indicating an improvement of some 88 per cent. in mortality since 1938. During the same period the number of cases notified each year has approximately halved, but to what extent this reduction derives from increasingly incomplete notification is uncertain.

Table LIV.—Erysipelas : Deaths and Notifications, 1923–27, 1928–32 and each year 1933 to 1949.

Year	Number of deaths†	Number of notifications	Deaths per 1,000 notifications	Year	Number of deaths	Number of notifications	Deaths per 1,000 notifications
1923–27 ..	617*	13,907*	44	1940 ..	214	13,123	16
1928–32 ..	810*	16,433*	49	1941 ..	190	12,232	16
1933 ..	973	17,997	54	1942 ..	141	11,598	12
1934 ..	1,192	20,643	58	1943 ..	124	11,833	10
1935 ..	867	16,926	51	1944 ..	119	(*a*) 11,240	
1936 ..	817	16,487	50			(*b*) 11,142	11
1937 ..	485	15,166	32	1945 ..	119	(*a*) 9,995	
1938 ..	342	16,671	21			(*b*) 9,848	12
1939 ..	248	14,141	18	1946 ..	82	(*a*) 9,243	
						(*b*) 9,067	9
				1947 ..	61	(*a*) 7,956	
						(*b*) 7,845	8
				1948 ..	51	(*a*) 9,259	
						(*b*) 9,115	6
				1949 ..	54	(*a*) 8,405	
						(*b*) 8,267	7

* Mean annual.
(*a*) Original notifications.
† Corrected to 1940 classification.
(*b*) Corrected for diagnosis revision.

Table LV.—Erysipelas : Corrected Notification and Fatality Rates by Sex and Age, 1946 to 1949.

Age (l.b.d.)	Notifications per 100,000 living								Deaths per 1,000 notifications			
	1946		1947		1948		1949		1946–7		1948–9	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Civilians												
0–	4	4	4	3	4	3	3	3	16	33	24	—
5–	4	4	3	4	4	5	4	4	—	—	4	—
15–	13	17	12	13	13	15	12	14	3	3	1	1
45–	36	45	33	39	38	45	33	39	6	3	4	4
65 and over ..	41	47	37	36	42	40	35	38	29	23	22	14
All ages .. .	**19**	**25**	**17**	**20**	**19**	**23**	**17**	**21**	**10**	**7**	**7**	**5**
Non-civilians .. .	42*	2*	29*	4*	20*	1*	7*	1*	—	—	—	—

* Number of notifications in England and Wales.

Table LV gives annual notification and fatality rates during 1946–49 by sex and age. Each year there was a female excess of notifications at ages 45–64 but at other ages sex differences were indefinite. There was little difference in the level of notification rates at ages 45–64 and 65 and over, but fatality was much higher in the older group.

Table LVI.—Deaths from Tetanus by Sex and Age in Regions and different classes of Area. 1940–49.

Area	Males							Females						
	0–	1–	5–	15–	45–	65–	Total	0–	1–	5–	15–	45–	65–	Total
England and Wales .. .	**25**	**52**	**156**	**141**	**153**	**78**	**605**	**14**	**25**	**33**	**74**	**54**	**30**	**230**
Regional Summary :														
South East	10	22	41	45	60	27	**205**	5	14	9	24	19	10	**81**
Greater London ..	4	10	22	22	23	8	**89**	3	5	4	8	2	—	**22**
Remainder of South East	6	12	19	23	37	19	**116**	2	9	5	16	17	10	**59**
North	10	8	38	42	32	17	**147**	4	2	3	22	18	4	**53**
North I	3	2	9	12	7	1	**34**	1	1	—	4	5	1	**12**
North II	2	4	5	9	7	7	**34**	—	—	—	7	2	—	**9**
North III	1	1	8	4	7	5	**26**	1	—	—	5	2	—	**8**
North IV	4	1	16	17	11	4	**53**	2	1	3	6	9	3	**24**
Midland	4	7	32	21	21	13	**98**	1	5	7	7	9	7	**36**
Midland I	2	4	23	17	13	11	**70**	1	—	5	4	5	5	**20**
Midland II	2	3	9	4	8	2	**28**	—	5	2	3	4	2	**16**
East	1	5	14	12	22	9	**63**	2	1	5	8	4	7	**27**
South West	—	5	11	16	14	7	**53**	—	3	4	8	3	2	**20**
Wales	—	5	20	5	4	5	**39**	2	—	5	5	1	—	**13**
Wales I	—	4	10	3	3	1	**21**	2	—	4	4	—	—	**10**
Wales II	—	1	10	2	1	4	**18**	—	—	1	1	1	—	**3**
Density Summary :														
County boroughs* ..	8	6	37	27	24	7	**109**	4	1	4	16	13	4	**42**
Other urban districts*	8	20	48	37	48	20	**181**	6	9	10	31	21	15	**92**
Rural districts* ..	5	16	49	55	58	43	**226**	1	10	15	19	18	11	**74**

* Excluding Greater London.

12. Tetanus.—In accordance with the International List of Causes of Death (5th Revision 1938), deaths from the following causes have not been assigned to tetanus: Tetany (87e : 1); Puerperal tetanus (147 a,b); tetanus due to a serious accident or an operation (classed to accident or to the disease necessitating operation or to 195 bb). Numbers of deaths actually assigned to tetanus averaged 88 male and 26 female per annum during 1931–35, 79 male and 22 female during 1936–40, 63 male and 26 female during 1941–45. From 1946 to 1949 deaths of males numbered 41, 49, 48, 61; and of females 22, 22, 21, 18. Thus there has been a large reduction in deaths of males since 1931–35 but practically no improvement among females.

Table LVI shows, with detail of sex and age, numbers of deaths assigned to tetanus in all regions and density aggregates in the years 1940–49. Mean annual death rates per million in the period in Greater London and the national density aggregates are shown below and demonstrate that, as would be expected, there was a large excess of mortality in the rural districts.

	Male	*Female*
Greater London	2·3	0·5
County boroughs*	1·8	0·6
Other urban districts*	2·8	1·3
Rural districts*	5·8	1·8
England and Wales	**2·9**	**1·0**

* Outside Greater London

13–22. Tuberculosis.—Deaths from all forms of tuberculosis numbered 21,983 in 1948, and 19,832 in 1949. An increase of 703 deaths in 1947 over 1946 was followed by decreases of 1,567 and 2,151 in 1948 and 1949 from the preceding year in each case. The average annual deaths during 1940–44 numbered 26,435 and during 1945–49, 22,433, showing a decrease during the second quinquennium of 15 per cent. Quarterly civilian deaths from **respiratory tuberculosis** during the five years 1945 to 1949 and the mean air temperature at Greenwich for the corresponding quarters were as follows :—

Year	Quarterly Deaths								Mean air temperature (°F.)			
	Males				Females							
	March	June	Sept.	Dec.	March	June	Sept.	Dec.	March	June	Sept.	Dec.
1945 ..	3,376	2,882	2,396	3,039	2,214	1,860	1,787	2,035	42·1	56·4	62·2	47·2
1946 ..	3,368	2,816	2,348	2,893	2,002	1,924	1,678	1,986	40·9	53·7	61·1	44·9
1947 ..	3,483	2,807	2,403	2,970	2,285	1,946	1,771	2,064	34·9	56·5	65·2	46·3
1948 ..	3,078	2,789	2,424	3,042	2,012	1,769	1,694	2,006	44·1	54·5	61·0	46·6
1949 ..	3,210	2,612	2,109	2,651	2,019	1,679	1,462	1,617	42·2	55·6	65·5	47·5

In the first quarter of 1947, when the mean air temperature was unusually low, the number of deaths was the highest of the five years for both males and females. To the total decrease of 915 deaths in 1948, a reduction of 678 in the relatively mild first quarter contributed 74 per cent. Deaths from **non-respiratory tuberculosis** tended to be fewest in the third or fourth quarters as is shown from the following table :—

Year	Males				Females			
	March	June	Sept.	Dec.	March	June	Sept.	Dec.
1945	514	552	487	377	470	529	438	406
1946	502	484	403	345	402	490	372	387
1947	468	490	383	372	466	468	371	305
1948	410	454	282	323	384	420	304	284
1949	388	314	289	273	302	263	261	241

Table LVII.—Tuberculosis of Respiratory System : Mortality by Sex and Age per million living. 1931–35 and each year 1936 to 1949.

Year	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
MALES											
1931–35	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936	58	15	42	356	788	818	959	1,225	1,146	672	304
1937	63	22	40	365	760	803	979	1,200	1,159	690	286
1938	64	17	49	348	718	739	858	1,133	1,085	643	237
1939*	54	15	31	368	682	723	859	1,158	1,171	678	214
Deaths registered at home per million total population (including Armed Forces at home and abroad)											
1940	50	23	42	371	718	792	938	1,186	1,288	725	262
1941	92	32	45	430	653	769	948	1,218	1,253	726	288
1942	71	24	32	364	594	674	824	1,079	1,144	707	300
1943	85	20	28	337	564	667	833	1,179	1,281	736	294
1944	67	24	29	287	537	637	740	1,077	1,188	750	308
1945	65	19	38	266	574	632	725	1,024	1,149	781	285
1946	68	22	23	239	481	615	687	1,020	1,165	768	340
1947	77	15	29	241	500	632	679	1,034	1,213	812	267
1948	56	10	14	211	445	603	633	961	1,166	881	334
1949	33	6	13	127	368	496	591	869	1,153	927	380
Civilian death rates											
1940	50	23	42	398	1,419	969	1,000	1,213	1,288	725	262
1941	92	32	45	479	1,674	1,192	1,036	1,232	1,253	726	288
1942	71	24	32	411	1,664	1,161	960	1,101	1,144	707	300
1943	85	20	28	423	1,786	1,296	1,023	1,219	1,281	736	294
1944	67	24	29	355	1,688	1,379	942	1,120	1,188	750	308
1945	65	19	38	321	1,781	1,334	902	1,055	1,149	781	285
1946	68	22	23	289	903	694	710	1,030	1,170	767	340
1947	77	15	29	301	618	628	677	1,040	1,215	812	267
1948	56	10	14	251	441	598	631	959	1,162	881	334
1949	33	6	13	157	395	506	596	869	1,154	927	380
FEMALES											
1931–35	74	43	143	840	1,138	911	646	475	394	306	170
1936	63	26	107	670	1,039	757	528	390	350	273	167
1937	61	20	105	652	1,029	798	537	388	342	263	138
1938	44	28	79	605	931	728	464	340	308	233	148
1939	38	20	85	601	955	708	470	353	301	237	145
Deaths registered at home per million total population (including Armed Forces at home and abroad)											
1940	55	24	100	725	1,060	758	517	354	319	263	137
1941	84	30	101	719	1,052	773	489	345	314	242	132
1942	68	18	67	620	952	676	421	306	279	220	131
1943	71	20	78	570	878	682	412	307	272	211	124
1944	70	24	63	523	844	670	395	273	253	210	105
1945	69	27	68	512	865	657	418	288	229	218	126
1946	60	25	69	468	842	662	382	261	242	207	119
1947	70	24	63	502	899	730	411	267	249	224	133
1948	52	19	53	462	812	702	367	255	235	218	105
1949	33	9	30	349	684	622	348	253	245	229	127
Civilian death rates											
1941†	84	30	101	727	1,079	777	490	346	314	242	132
1942	68	18	67	643	1,033	687	422	306	279	220	131
1943	71	20	78	595	999	696	414	307	272	211	124
1944	70	24	63	537	962	687	396	274	253	210	105
1945	69	27	68	523	974	674	420	288	229	218	126
1946	60	25	69	473	875	666	382	261	242	207	119
1947	70	24	63	507	909	728	411	267	249	224	133
1948	52	19	53	466	815	701	367	255	235	218	105
1949	33	9	30	351	688	623	348	253	245	229	127

The rates for 1931–39 are corrected to 1940 classification.

* Total death rates based on mid-1939 population.

† Civilians from mid-1941.

Table LVII shows the death rates in quinquennial age groups up to 24 and thereafter in decennial groups up to 75 for 1931–35 and for single years from 1936 to 1949. Since the tuberculous are either excluded from the Armed Forces in the first place or are subsequently discharged, the civilian death rates are somewhat misleading ; hence in Table LVII death rates based on all deaths registered at home are also shown and indicate the trend of mortality more accurately. For males and females aged 0–54, the rates in 1949 were the lowest of the period 1936 to 1949, whereas at ages 65 and over the rates for men were the highest of those years. The general decrease in the rates for males at ages under 55, which in some age groups had received a check in 1947, continued during 1948 and 1949 ; the rates at ages 55 to 64 also declined during 1947–49, but at ages 65–74 and 75 and over the rise which began some years previously continued. Rates for females declined in each age group under 55 during 1947–49, but at ages 55 and over a fall in 1948 was followed by a rise in 1949.

The average rates for 1948–49 expressed as percentages of the average rates for 1937–38, which might be regarded as the last normal pre-war years, are as follows :—

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males	70	41	30	47	55	71	67	78	103	136	137
Females ..	81	58	45	65	76	87	71	70	74	90	81

The decrease in female rates at ages under 45 has not been as great as in male rates, and rates for young women at ages 15–34 are still greatly in excess of those for men of the same ages.

The following table shows the equivalent average death rates at ages 0–14 and 15–54 and the age specific death rates at ages 55–, 65– and 75 and over in terms of the corresponding average rates for 1931–35 as 100 :—

Age Group	Males							Females						
	1931–35	1938	1945	1946	1947	1948	1949	1931–35	1938	1945	1946	1947	1948	1949
0–14 (E A.D.R.)	100	68	64	59	63	42	27	100	58	63	59	60	48	28
15–54 (E.A.D.R.)	100	78	67	64	65	60	53	100	76	68	65	70	65	58
55–	100	92	98	99	103	99	98	100	78	58	61	63	60	62
65–	100	89	108	106	112	122	128	100	76	71	68	73	71	75
75 and over ..	100	86	104	124	97	121	138	100	87	74	70	78	62	75

The upward trend in rates for men aged 55–64 has not been maintained in 1948 and 1949, but by 1949 rates for men in the two highest age groups were roughly 30 and 40 per cent., respectively, above those in 1931–35. Since the increase is not shared by women of the same ages, it seems that the causative factor must be intrinsic to men and independent of social conditions or changes in the methods of diagnosis, which would be expected to affect the two sexes similarly.

In the following table the death rates for males aged 15 and over are expressed as percentages of the corresponding rates for females :—

Year	15–	20–	25–	35–	45–	55–	65–	75 and over
1931-35 ..	58	85	105	176	288	298	236	162
1938	58	77	102	185	333	352	276	160
1941	60	62	99	194	353	399	300	218
1943	59	64	98	202	384	471	349	237
1945	52	66	96	173	356	502	358	226
1947	48	56	87	165	387	487	363	201
1949	36	54	80	170	343	471	405	299

In the age groups 15–19 and 25–34 the sex-ratio has moved steadily in favour of males ; at ages 20–24 the downward trend, which was interrupted during the war, was resumed. At ages 45 and over the sex-ratio has everywhere increased, the ratios for 1949 at ages 55–64 and 65–74 being 58 and 72 per cent., respectively, above the 1931–35 average.

The shift of the age of maximum death rates among men into the higher age groups is demonstrated by the following table, in which the rates for each year are expressed as percentages of the corresponding rates at ages 25–34 :—

Sex and Year		15-	20-	25-	35-	45-	55-	65-	75 and over
Males	1931–35 ..	51	100	100	119	142	122	75	29
	1938	47	97	100	116	153	147	87	32
	1945	42	91	100	115	162	182	124	45
	1947	38	79	100	107	164	192	128	42
	1949	26	74	100	119	175	232	187	77
Females	1931–35 ..	92	125	100	71	52	43	34	19
	1938	83	128	100	64	47	42	32	20
	1945	78	132	100	64	44	35	33	21
	1947	69	123	100	56	37	34	31	18
	1949	56	110	100	56	41	39	37	20

Whereas for men in 1938 the rates increased by age to a maximum in the age group 45–54, by 1945 the maximum rates occurred in the 55–64 group and by 1949 the maximum was still showing a trend towards higher ages. Among women the maximum rates have occurred consistently around the early twenties and thereafter the rates have decreased with age.

Table LVIII.—Tuberculosis, non-respiratory : Mortality by Sex and Age per million living, 1931–35 and each year 1936 to 1949.

	Meninges and Central Nervous System						Other non-respiratory tuberculosis					
	0–	5–	10–	15–	25–54 E.A.D.R.	55 and over	0–	5–	10–	15–	25–54 E.A.D.R.	55 and over
	Males						**Males**					
1931–35 ..	414	123	66	49	13	3	219	71	61	105	71	75
1936	313	129	60	42	11	3	152	52	42	92	66	61
1937	319	91	66	42	13	2	168	55	43	79	71	60
1938	297	96	57	42	13	3	156	45	39	87	61	52
1939	284	90	52	38	12	4	125	53	34	89	63	60
1940	300	96	55	48	13	3	146	41	35	89	65	62
1941	402	136	67	55	14	4	188	46	43	91	61	59
1942	321	107	67	53	14	2	134	50	46	84	65	59
1943	288	110	55	51	12	5	134	42	36	74	56	54
1944	273	102	62	51	12	2	109	34	34	67	51	59
1945	266	100	65	47	11	2	107	38	35	67	53	49
1946	221	86	72	42	10	3	87	21	27	51	50	43
1947	215	83	53	39	11	5	92	33	25	46	44	44
1948	179	62	33	30	9	4	57	25	16	41	41	44
1949	153	54	25	26	7	4	34	15	14	38	37	38
	Females						**Females**					
1931–35 ..	356	125	73	48	10	2	160	59	50	84	58	62
1936	283	98	58	47	9	2	129	37	38	66	51	45
1937	291	89	61	50	9	1	132	46	43	72	48	52
1938	300	100	60	40	8	2	112	40	36	73	45	42
1939	252	77	66	47	9	2	102	38	32	69	41	40
1940	278	96	71	61	9	2	118	34	26	80	50	40
1941	370	138	80	70	11	2	141	50	34	83	43	48
1942	290	101	69	64	12	1	92	30	44	79	49	42
1943	277	106	63	72	11	3	101	32	34	74	42	46
1944	234	95	78	58	10	4	86	33	26	67	42	44
1945	246	107	70	60	10	2	84	29	41	55	35	42
1946	198	97	67	52	9	2	64	28	22	53	34	37
1947	184	78	55	52	9	2	65	26	29	57	34	35
1948	166	53	54	44	8	3	56	20	15	39	30	34
1949	126	45	35	33	8	2	33	10	7	26	24	27

The rates for 1931–39 are corrected to the 1940 Classification. Rates from 1939 onwards are deaths registered at home per million population (including Armed Forces at home and abroad).

Table LVIII shows that the death rates from **tuberculous meningitis** reached new low levels in 1949 at ages under 55 for both sexes. For boys aged under 5 the rates fell from 402 in 1941 to 153 in 1949, a reduction of 62 per cent., while for those aged 5–9 there was a decrease of 60 per cent. from 136 to 54. Among girls in these age groups there was a general downward trend between 1941 and 1949, rates for those under 5 falling 66 per cent. from 370 to 126, and at ages 5–9, 67 per cent. from 138 to 45. For boys aged 10–14 the rate decreased by 65 per cent. in the four years 1946–49. Rates for **other forms of non-respiratory tuberculosis** in 1949 were the lowest in all age groups for both sexes during 1936–49; reductions in the rates for children under 5 from the high levels reached in 1941 were 82 per cent. for boys and 77 per cent. for girls.

Table LIX.—Tuberculosis of Various Sites: Comparative Mortality Indices.* 1931 to 1949.

Year	All forms		Respiratory		Meninges and C.N.S.		Intestines and peritoneum		Vertebræ and bones		Other forms	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1931	1·393	1·469	1·384	1·469	1·440	1·392	1·754	1·912	1·532	1·719	1·236	1·233
1932	1·298	1·377	1·274	1·364	1·381	1·280	1·779	1·649	1·453	1·877	1·281	1·339
1933	1·292	1·342	1·291	1·353	1·207	1·178	1·503	1·723	1·464	1·522	1·188	1·100
1934	1·199	1·244	1·191	1·235	1·218	1·220	1·344	1·447	1·414	1·564	1·074	1·120
1935	1·125	1·163	1·125	1·175	1·103	1·006	1·229	1·314	1·289	1·387	0·971	0·983
1936	1·088	1·104	1·089	1·112	1·056	0·998	1·080	1·225	1·207	1·330	1·021	0·948
1937	1·083	1·116	1·083	1·120	1·043	1·022	1·190	1·093	1·116	1·235	1·045	1·120
1938	1·000	1·000	1·000	1·000	1·000	1·000	1·000	1·000	1·000	1·000	1·000	1·000
1939	1·013	0·985	1·024	0·996	0·921	0·934	0·957	0·915	1·054	1·140	0·985	0·926
1940	1·181	1·084	1·223	1·093	1·056	1·065	1·090	1·045	1·100	0·987	1·164	1·049
1941	1·280	1·114	1·362	1·092	1·415	1·368	1·274	1·004	1·033	1·105	1·321	1·123
1942	1·188	0·991	1·267	0·971	1·202	1·132	1·272	1·082	1·296	1·058	1·130	0·985
1943	1·263	0·975	1·328	0·955	1·132	1·142	1·024	0·963	1·217	0·991	1·136	0·978
1944	1·205	0·922	1·269	0·908	1·046	1·021	0·970	0·808	1·052	0·941	1·112	0·998
1945	1·166	0·918	1·234	0·913	1·013	1·041	0·925	0·711	1·008	0·805	1·080	0·918
1946	0·936	0·855	0·971	0·860	0·875	0·891	0·689	0·534	0·691	0·796	0·812	0·865
1947	0·903	0·893	0·931	0·916	0·813	0·813	0·561	0·623	0·578	0·661	0·832	0·862
1948	0·830	0·815	0·866	0·849	0·640	0·697	0·449	0·508	0·539	0·649	0·701	0·676
1949	0·761	0·718	0·801	0·766	0·547	0·557	0·386	0·374	0·393	0·476	0·639	0·486

* Non-civilian males are excluded from 3rd September, 1939, and non-civilian females from 1st June, 1941.

The comparative mortality indices for tuberculosis since 1931 are shown in Table LIX and in 1949 were the lowest for both males and females since that date. The downward trend in the indices for all forms of the disease has been evident for men since 1943, while for women an increase in 1947 was followed by a decrease in 1948 which brought the figure for that year below that for 1946. In particular the indices for tuberculosis of the intestines and peritoneum have decreased from 1·779 for males in 1932 and 1·912 for females in 1931 to 0·386 and 0·374 respectively in 1949. Since the C.M.I. is based on civilian experience only, the indices were biased by the inclusion in the civilian population of tuberculous persons rejected by the Services. Taking the population as a whole, the following table shows that there was an improvement in male mortality at ages under 65 of 23 per cent. between 1938 and 1949, compared with 25 per cent. for females.

	Males under 65					Females under 65				
	1931–35	1938	1945	1947	1949	1931–35	1938	1945	1947	1949
E.A.D.R. (per million) ..	841	679	617	614	520	545	413	363	375	311
Per cent. of 1938 ..	124	100	91	90	77	132	100	88	91	75

Regional Distribution of Respiratory Tuberculosis.—Table LX shows the death rates by sex and age per million living in the geographical regions in 1949. Rates in italics are based on less than 20 deaths and are subject to large standard errors. In England and Wales in 1949, 63 boys and 59 girls died at ages under 5; of these 11 boys and 8 girls died in Greater London, giving death rates of 31 and 24 per million with standard errors of 9 and 8, respectively. At ages 5–14 the standard errors in the rates of 8 and 10 per million were each 4.

Table LX.—Tuberculosis of Respiratory System : Mortality by Sex and Age per million living in Regions. 1949 (Non-civilians excluded).

Area	Males (age l.b.d.)						Females (age l.b.d.)					
	0–	5–	15–	25–	45–	65 and over	0–	5–	15–	25–	45–	65 and over
England and Wales ..	**33**	**9**	**288**	**553**	**990**	**763**	**33**	**19**	**526**	**482**	**249**	**194**
Regional Summary :												
South East	31	*7*	239	450	957	920	*18*	*8*	326	373	228	204
Greater London ..	*31*	*8*	259	451	1,062	1,163	*24*	*10*	364	384	250	220
Remainder	*32*	*7*	213	450	818	673	*11*	*5*	275	357	200	186
North	38	*12*	312	599	1,072	734	44	22	659	564	267	168
North I	*48*	*18*	368	809	1,267	660	*51*	*19*	952	729	295	188
North II	*81*	*10*	329	639	1,035	645	*68*	*31*	766	730	348	*193*
North III	*13*	*12*	210	451	944	753	*40*	*17*	498	429	246	116
North IV	*40*	*9*	344	601	1,086	771	*38*	*24*	610	550	254	186
Midland	*35*	*9*	278	622	1,009	681	*40*	*26*	657	522	253	203
Midland I	*45*	*10*	307	641	1,120	724	*30*	*22*	710	531	238	233
Midland II	*16*	*5*	223	585	727	603	*60*	*34*	552	502	282	146
East	*22*	—	208	420	673	486	*12*	*8*	394	375	192	178
South West	—	*19*	283	548	779	476	*33*	*7*	356	419	198	203
Wales	*45*	*11*	491	782	1,111	808	*48*	*67*	794	724	357	243
Wales I	*37*	*15*	595	788	1,088	788	*52*	*54*	867	731	376	232
Wales II	*69*	—	*205*	765	1,171	850	*36*	*102*	596	708	313	*264*
Density Summary :												
County boroughs* ..	46	*11*	358	700	1,307	897	59	27	722	630	304	198
Other urban districts*	*28*	*9*	294	541	854	624	*23*	*16*	509	461	223	177
Rural districts* ..	*23*	*9*	195	439	642	482	*15*	*20*	388	379	201	192

* Excluding Greater London

North I had the highest rates for males aged 25–44 and 45–64 and the second highest at ages 15–24 ; for women this region had the highest mortality rate at ages 15–24 and ranked third and fourth, respectively, at ages 25–44 and 45–64. Wales I had highest rates for males aged 15–24 and for females aged 25–44 and 45–64, and the second highest for males aged 25–44 and females aged 15–24. The lowest rates occurred in the East and South West regions and in the part of the South East region outside Greater London. The Greater London area showed the highest rate for men aged 65 and over, and ranked fourth for women in this age group.

The order of ranking of the twelve regions according to death rates was closely related for males and females aged 25–44, the rank correlation coefficient* $\rho = 0{\cdot}916$, $t = 7{\cdot}22$, and also between females aged 15–24 and those aged 25–44 ($\rho = 0{\cdot}923$, $t = 7{\cdot}58$) ; there was also a significant relation between rankings for females aged 15–24 and those aged 45–64 ($\rho = 0{\cdot}748$, $t = 3{\cdot}56$). The ranking was different for males and females aged 65 and over ($\rho = 0{\cdot}446$, $t = 1{\cdot}57$), for males aged 15–24 and those aged 45–64 ($\rho = 0{\cdot}448$, $t = 1{\cdot}59$) and for males aged 25–44 and those aged 65 and over ($\rho = 0{\cdot}252$, $t = 0{\cdot}82$), whilst the order for females aged 65 and over differed significantly from that for females aged 25–44 ($\rho = 0{\cdot}404$, $t = 1{\cdot}40$), and for those aged 45–64 ($\rho = 0{\cdot}330$, $t = 1{\cdot}11$).

* The 5 per cent. level of Student's t with $12 - 2 = 10$ degrees of freedom is 2·23.

Table LXIa.—Tuberculosis of Respiratory System : Mortality by Sex at Ages 15 and over per million living in Counties (including County Boroughs) with populations exceeding 250,000. 1948. (Non-civilians excluded.)

Area	Males				Females			
	15–	25–	45–	65 and over	15–	25–	45–	65 and over
England and Wales ..	**355**	**615**	**1,047**	**720**	**647**	**531**	**246**	**180**
Bedfordshire	*128*	469	919	*680*	*449*	*398*	*247*	*110*
Berkshire	*221*	538	843	*525*	719	*295*	*307*	*75*
Buckinghamshire ..	*412*	*339*	734	*520*	*413*	372	*221*	*86*
Cheshire	365	647	1,088	598	561	408	195	*176*
Cornwall	*180*	627	645	*372*	*654*	*349*	*219*	*267*
Cumberland	*421*	809	1,236	*464*	*973*	648	*355*	*245*
Derbyshire	*237*	470	772	622	*287*	457	*112*	*136*
Devon	*501*	666	802	556	787	652	244	*177*
Dorset	*379*	*493*	711	*649*	*226*	518	*136*	*184*
Durham	453	779	962	693	1,101	836	382	299
Essex	352	512	984	606	473	473	230	228
Gloucestershire ..	526	703	1,139	820	1,038	497	235	*166*
Hertfordshire	*198*	558	776	*522*	*451*	354	*150*	*28*
Kent	473	623	964	629	402	540	311	*126*
Lancashire	415	703	1,309	777	805	623	236	244
Leicestershire	*116*	739	1,002	*555*	844	543	354	*190*
Lincolnshire (Lindsey) ..	*360*	648	657	*306*	*585*	527	*189*	*147*
London	436	710	1,579	1,465	621	582	268	223
Middlesex	422	463	829	784	387	399	189	*124*
Norfolk	*331*	619	794	*444*	*350*	478	*214*	*241*
Northamptonshire ..	*683*	504	724	*592*	*630*	438	*174*	*127*
Northumberland ..	653	800	1,343	*447*	973	779	328	*162*
Nottinghamshire ..	498	550	834	884	967	590	221	*204*
Oxford	*359*	*451*	*597*	*504*	*455*	*470*	*257*	*177*
Shropshire	*310*	690	*658*	*73*	*486*	*230*	*224*	*181*
Somerset	*327*	589	603	*455*	*505*	398	*234*	*208*
Southampton	450	630	1,091	469	431	481	275	*213*
Staffordshire	403	756	1,338	979	840	538	292	*190*
Suffolk, East	*246*	465	743	*346*	*291*	*397*	*360*	*180*
Surrey	310	553	913	632	476	336	154	*148*
Sussex, East	*188*	512	871	637	*296*	504	250	*193*
Sussex, West	*211*	673	769	*572*	*426*	*402*	*246*	*129*
Warwickshire	516	654	1,524	944	666	540	254	*125*
Wiltshire	*259*	*268*	771	*513*	*716*	403	*214*	*89*
Worcestershire	*473*	529	934	*490*	560	621	*259*	*163*
Yorkshire, E. Riding ..	*358*	523	1,254	*412*	680	613	*300*	*136*
Yorkshire, N. Riding ..	*491*	740	1,088	*649*	563	534	*304*	*101*
Yorkshire, W. Riding ..	280	545	969	793	562	489	203	138
Glamorganshire ..	658	850	1,079	700	980	857	362	*261*
Monmouthshire	*436*	674	1,313	*916*	903	669	*264*	*95*

Table LXIb.—Tuberculosis of Respiratory System : Mortality by Sex at Ages 15 and over per million living in Counties (including County Boroughs) with populations exceeding 250,000. 1949. (Non-civilians excluded.)

Area	Males				Females			
	15–	25–	45–	65 and over	15–	25–	45–	65 and over
England and Wales ..	**288**	**553**	**990**	**763**	**526**	**482**	**249**	**194**
Bedfordshire	*64*	597	796	*605*	*250*	*251*	*302*	*331*
Berkshire	*265*	394	651	*787*	*288*	*147*	*287*	*151*
Buckinghamshire ..	*52*	482	658	*520*	*165*	389	*133*	*172*
Cheshire	349	635	782	725	535	449	177	*214*
Cornwall	*359*	720	725	*797*	*467*	431	*241*	*152*
Cumberland	*421*	834	1,035	*697*	1,485	723	*325*	*122*
Derbyshire	*172*	541	728	*514*	*341*	289	234	*182*
Devon	*264*	646	941	*417*	404	555	320	*241*
Dorset	*152*	*406*	*643*	*389*	*169*	*321*	*54*	*276*
Durham	420	860	1,345	645	975	723	292	*242*
Essex	205	422	984	979	296	416	242	169
Gloucestershire ..	*243*	556	903	627	551	482	287	*265*
Hertfordshire	*165*	312	631	*602*	*175*	292	*219*	*56*
Kent	445	552	928	765	462	460	238	261
Lancashire	392	609	1,199	800	621	573	279	185
Leicestershire	*174*	611	957	*481*	492	647	329	*217*
Lincolnshire (Lindsey) ..	*360*	527	903	*656*	650	663	*132*	*147*
London	320	490	1,396	1,612	402	424	307	256
Middlesex	266	419	889	915	347	343	223	194
Norfolk	*221*	413	829	*512*	*321*	372	*260*	*214*
Northamptonshire ..	*228*	543	1,023	*700*	*540*	495	*196*	*127*
Northumberland ..	*392*	766	1,238	726	885	738	318	*116*
Nottinghamshire ..	*368*	686	766	825	844	621	362	91
Oxford	*154*	*150*	*448*	*673*	*253*	*148*	*32*	*412*
Shropshire	*248*	638	*624*	*586*	*702*	638	*64*	*181*
Somerset	*473*	479	854	*385*	*309*	361	*151*	*184*
Southampton	*300*	491	1,049	775	323	357	261	*213*
Staffordshire	403	664	1,332	866	744	614	281	253
Suffolk, East	*246*	*349*	654	*288*	*242*	*309*	*206*	*135*
Surrey	*229*	414	804	531	233	286	158	204
Sussex, East	*113*	607	839	748	*216*	392	*174*	*193*
Sussex, West	*281*	566	769	*364*	*107*	*424*	*45*	*96*
Warwickshire	355	707	1,283	858	724	483	194	239
Wiltshire	*259*	475	591	*570*	*337*	*269*	*71*	*179*
Worcestershire	*328*	606	934	*446*	756	469	*194*	*163*
Yorkshire, E. Riding ..	*358*	413	1,293	*457*	595	747	449	*170*
Yorkshire, N. Riding ..	*351*	626	991	865	591	712	*287*	*169*
Yorkshire, W. Riding ..	233	457	964	761	490	424	248	119
Glamorganshire ..	731	838	1,101	947	920	729	403	*212*
Monmouthshire	*516*	722	1,230	*560*	769	734	447	*190*

(55588)

MALES

25–44				45–64				65 and over			
1947		1949		1947		1949		1947		1949	
Northumberland ..	1,013	Durham	860	London	1,605	London	1,396	London	1,304	London	1,612
Glamorganshire ..	884	Glamorganshire ..	838	Warwickshire ..	1,393	Durham	1,345	Surrey	761	Essex	979
Durham	879	Cumberland ..	834	Lancashire ..	1,347	Staffordshire ..	1,332	Glamorganshire ..	757	Glamorganshire ..	947
Devon	789	Northumberland ..	766	Yorkshire, E. Riding	1,293	Yorkshire, E. Riding	1,293	Warwickshire ..	715	Middlesex	915
Yorkshire, E. Riding	785	Monmouthshire ..	722	Glamorganshire ..	1,287	Warwickshire ..	1,283	Staffordshire ..	706	Staffordshire ..	866
Bedfordshire ..	384	Oxford	150	Suffolk, East ..	297	Oxford	448	Shropshire ..	220	Suffolk, East ..	288
Wiltshire	392	Hertfordshire ..	312	Bedfordshire ..	521	Wiltshire	591	Bedfordshire ..	302	Sussex, West ..	364
Surrey	409	Suffolk, East ..	349	Oxford	522	Shropshire ..	624	Worcestershire ..	312	Somerset	385
Derbyshire	414	Berkshire	394	Wiltshire	540	Hertfordshire ..	631	Berkshire	315	Dorset	389
Sussex, West ..	458	Derbyshire ..	406	Shropshire ..	693	Dorset	643	Dorset	324	Devon	417
		Dorset	406								

FEMALES

15–24				25–44				45–64			
1947		1949		1947		1949		1947		1949	
Durham	1,282	Cumberland ..	1,485	Glamorganshire ..	857	Yorkshire, E. Riding	747	Leicestershire ..	531	Yorkshire, E. Riding	449
Glamorganshire ..	1,231	Durham	975	Durham	855	Northumberland ..	738	London	388	Monmouthshire ..	447
Northumberland ..	1,132	Glamorganshire ..	920	Northumberland ..	837	Monmouthshire ..	734	Berkshire	369	Glamorganshire ..	403
Cumberland ..	1,126	Northumberland ..	885	Monmouthshire ..	750	Glamorganshire ..	729	Monmouthshire ..	366	Nottinghamshire ..	362
Gloucestershire ..	1,007	Nottinghamshire ..	844	Worcestershire ..	684	Durham	723	Devon	357	Leicestershire ..	329
						Cumberland ..	723				
Sussex, East ..	189	Sussex, West ..	107	Northampton ..	323	Berkshire	147	Dorset	81	Oxford	32
Northampton ..	315	Buckinghamshire ..	165	Derbyshire ..	337	Oxford	148	Cheshire	122	Sussex, West ..	45
Norfolk	321	Dorset	169	Cornwall	349	Bedfordshire ..	251	Bedfordshire ..	137	Dorset	54
Derbyshire	359	Hertfordshire ..	175	Buckinghamshire ..	372	Wiltshire	269	Norfolk	138	Shropshire	64
Sussex, West ..	373	Sussex, East ..	216	Surrey	382	Surrey	286	Suffolk, East ..	154	Wiltshire	71

Table LXI shows the mortality rates for civilians at ages 15 and over per million in counties with total populations exceeding 250,000. In the table opposite the five counties with the highest and those with the lowest rates in 1947 and 1949 are shown. The age groups 15–24 for males and 65 and over for women have not been considered because they each contain a large proportion of rates with less than 20 deaths.

Glamorganshire had persistently high rates for both males and females in the age-groups shown above. Westmorland is excluded from the table as its population does not exceed 250,000, but the remaining three northernmost counties, Northumberland, Cumberland and Durham, had very high death rates for men aged 25–44 and women aged 15–24. The high rates for men in London at ages 45–64 and 65 and over will be noticed, and the following table compares the death rates per million living at different ages for 1931, 1938 and 1947, the last year having been chosen in preference to 1949 because the special analysis of the populations by sex and age, derived from the National Register, was available for 1947.†

Region and Year		Males				Females			
		15–	25–	45–	65 and over	15–	25–	45–	65 and over
England and Wales	1931	**843**	**1,219**	**1,431**	**654**	**1,098**	**902**	**515**	**320**
	1938	**539**	**814**	**1,153**	**583**	**782**	**614**	**338**	**226**
	1947	**438**	**649**	**1,104**	**647**	**721**	**569**	**257**	**191**
London Administrative County	1931	945	1,383	2,083	1,159	1,122	881	603	428
	1938	812	1,041	1,821	1,079	904	817	435	382
	1947	483	754	1,605	1,304	743	600	388	293
Rest of Greater London	1931	812	1,090	1,274	598	823	748	424	259
	1938	615	775	950	468	755	522	282	229
	1947	321	517	923	761	554	489	226	139
County boroughs*	1931	1,047	1,494	1,941	812	1,301	1,037	631	327
	1938	645	990	1,579	762	976	722	411	232
	1947	582	817	1,500	816	892	688	309	210
Urban districts*	1931	758	1,121	1,120	562	1,031	850	451	327
	1938	525	747	905	496	723	594	313	207
	1947	414	601	938	493	711	548	219	186
Rural districts*	1931	576	870	802	394	956	843	410	271
	1938	368	585	704	356	641	513	276	203
	1947	302	490	666	385	534	440	200	154

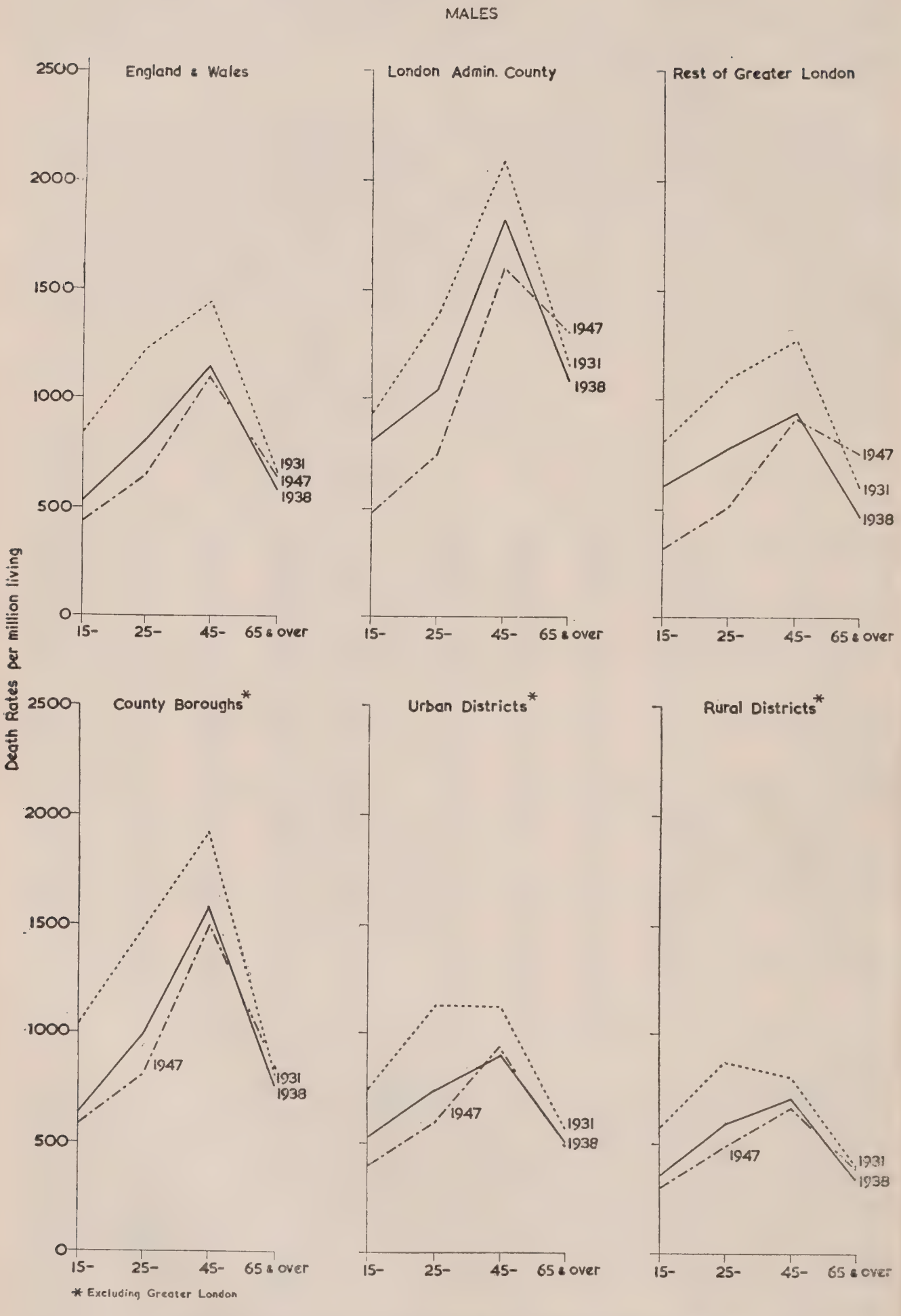
* Outside Greater London.

In the country as a whole, London Administrative County, the rest of Greater London and the county boroughs outside London, the highest death rates for men occurred at ages 45–64 in each of the three years. (*See* Diagram 3). The male death rates at ages 65 and over, which had shown a decrease in 1938 compared with 1931 in each of the density aggregates, had increased again by 1947 except in the urban districts outside Greater London. Two explanations among others which have been given to account for this are that elderly men have borne the stress of two wars (those aged 65 in 1947 were aged 32 in 1914)

† Estimates of the Sex and Age Distribution of the Civilian Population in Regions and Administrative Areas of England and Wales as at 31st December, 1947. H.M.S.O., price 2*s.* 6*d.* net (by post 2*s.* 8*d.*).

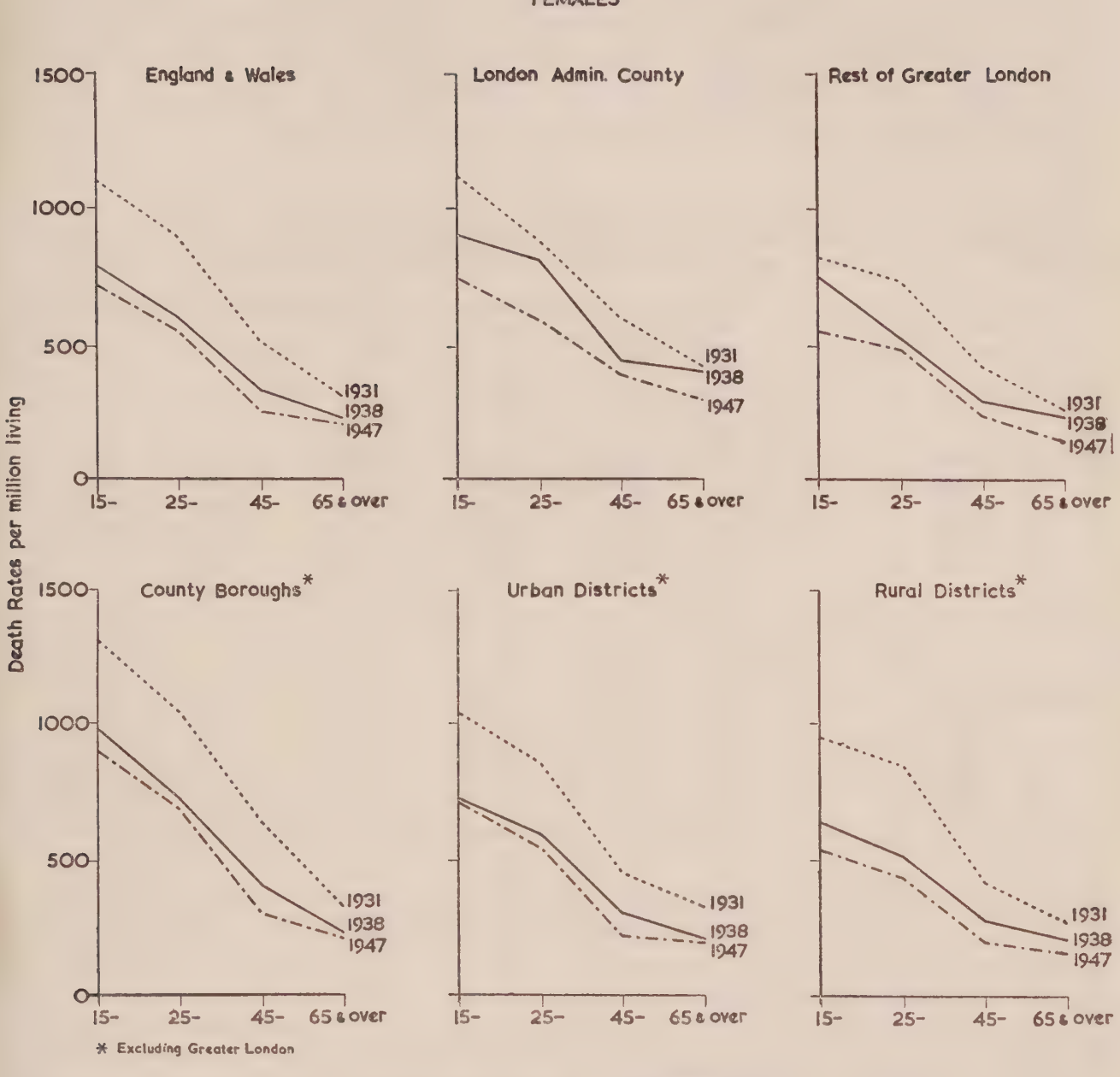
(55588)

Diagram 3



Respiratory tuberculosis death rates per million living in sex-age groups for certain density aggregates in 1931, 1938 and 1947.

Diagram 3—*continued*



Respiratory tuberculosis death rates per million living in sex-age groups for certain density aggregates in 1931, 1938 and 1947.

and that deaths in older men occurred among those who had had a former attack which had recrudesced. The increase in male death rates at ages 65 and over in 1947 was most striking in Greater London. Certainly in no other part of the country were people so long and continuously subjected to the conditions of shelter-life as in and around London. Nevertheless, despite these conditions, the rates for younger women of 15–24, the most susceptible age-group, declined between 1931 and 1947. Women's rates showed a steady decrease, both with advancing age in each of the three years and also within each age group as between 1931 and 1947.

Compared with 1947, the rates for men in the three age groups between 15 and 64 decreased in both 1948 and 1949 in Kent, Lancashire, London and the West Riding, but in the three former counties there was an increase at ages 65 and over, and also in Middlesex, Northampton, East Sussex and the North Riding. Bedford, Cumberland and Derby were the only three counties in which the rates

increased in both years for men aged 25–44. In Cornwall decreases at all ages in 1948 was followed by increases in 1949. Rates for women aged 15–24 and 25–44 declined in both 1948 and 1949 in Bedford, Dorset, Durham, Essex, Hertford, London, Middlesex, Northumberland, Oxford, Somerset, Southampton, East Suffolk, Surrey, the West Riding and Glamorgan. In Lancashire, Norfolk, Nottingham and Glamorgan the rates increased for women aged 45–64. Shropshire was the only county in which the rates increased in both years at ages 15–24.

Notifications of respiratory tuberculosis numbered 43,971 in 1948 and 44,480 in 1949. The sex and age distribution in the last five years was as follows :—

Sex and Year		0–	15–	25–	45 and over	All ages
Males	1945	1,643	5,557	9,860	7,453	24,333
	1946	1,826	5,581	9,837	7,285	24,529
	1947	2,217	5,864	9,193	7,399	24,673
	1948	2,297	5,417	9,235	7,763	24,712
	1949	2,320	5,396	9,322	8,303	25,341
Females	1945	1,519	7,087	6,976	2,251	17,833
	1946	1,769	6,648	6,921	2,306	17,644
	1947	1,978	7,043	7,119	2,346	18,486
	1948	2,422	7,158	7,328	2,351	19,259
	1949	2,321	6,945	7,474	2,399	19,139

The numbers of deaths from tuberculosis which was not notified before death in the same period were 2,411, 2,436, 2,615 2,664 and 2,600. The male notification rates per 100,000 living showed increases in 1949 compared with 1947 at ages 0–4, 45–64 and 65 and over, and decreases at ages from 5 to 44, while for females the rates increased at ages under 15 and 25–44, decreased slightly at 15–24 and showed no change at ages 45 and over. The rates for the two years per 100,000 living and the corresponding sex-ratios of male to female rates were as follows :—

Sex and year		0–	5–	15–	25–	45–	65 and over
Males	1947 ..	39	52	258	145	137	55
	1949 ..	46	49	180	140	146	68
Females	1947 ..	32	51	240	106	35	17
	1949 ..	44	53	238	112	35	17
Sex-ratio M/F	1947 ..	1·2	1·0	1·1	1·4	3·9	3·2
	1949 ..	1·0	0·9	0·8	1·3	4·2	4·0

The notification rates for males aged 45–64 and 65 and over increased by 6 and 24 per cent. respectively while those for women of the same ages remained unchanged. The sex-ratio of male to female notification rates decreased at ages up to 44 and increased at ages 45 and upwards.

Table LXII.—Tuberculosis of Respiratory System : Notifications by Sex and Age per 100,000 living in Regions and Counties (including associated County Boroughs), 1949. (Including non-civilians).

	Males						Females					
	0–	5–	15–	25–	45–	65 and over	0–	5–	15–	25–	45–	65 and over
England and Wales	**46**	**49**	**180**	**140**	**146**	**68**	**44**	**53**	**238**	**112**	**35**	**17**
Regional Summary :												
South East	55	54	228	158	155	82	55	57	246	118	36	19
North	48	51	150	130	153	70	45	53	243	111	32	17
North I	70	95	167	142	167	51	59	80	314	128	28	*15*
North II	48	29	146	130	118	42	47	48	231	118	40	*12*
North III	50	55	129	118	138	59	49	65	193	95	26	15
North IV	37	37	156	132	165	89	37	37	246	113	35	20
Midland	40	49	158	128	141	63	37	55	220	104	38	18
Midland I	43	50	166	132	155	72	36	57	224	104	38	20
Midland II	34	48	141	118	116	48	40	51	211	102	38	14
East	28	27	115	100	86	30	31	29	157	76	30	15
South West	22	34	185	127	110	28	*21*	38	194	96	28	13
Wales	38	47	202	170	148	68	36	65	315	141	40	*12*
Wales I	40	48	213	175	154	57	38	68	347	152	40	*13*
Wales II	*34*	45	171	158	134	93	*32*	59	225	112	39	*9*
Bedfordshire	*23*	*43*	195	167	179	*67*	*56*	*50*	261	112	57	*21*
Berkshire	*30*	*39*	176	157	137	*88*	*44*	*26*	142	123	47	*15*
Buckinghamshire	*19*	*40*	156	127	88	*28*	*40*	*48*	218	99	*32*	*17*
Cambridgeshire	*59*	*10*	151	123	*94*	*34*	*93*	*21*	*142*	135	*33*	*25*
Cheshire	*19*	*18*	130	106	116	71	*22*	32	189	92	28	*12*
Cornwall	*22*	*41*	205	105	84	*26*	*31*	*61*	141	116	*30*	*15*
Cumberland	*33*	*24*	173	137	123	*53*	*35*	*41*	252	148	*47*	*12*
Derbyshire	*16*	*28*	117	116	108	*51*	*31*	*24*	155	74	27	*11*
Devon	*16*	*30*	208	144	85	*23*	*20*	*37*	239	97	29	*19*
Dorset	*26*	*30*	155	72	134	*32*	*9*	*11*	*107*	64	*27*	*13*
Durham	67	109	152	138	162	54	60	93	307	127	32	*15*
Ely, Isle of	—	*16*	*69*	*45*	*51*	*65*	*27*	*17*	*62*	*115*	*20*	—
Essex	36	47	190	127	110	56	58	42	211	103	22	*14*
Gloucestershire	*29*	40	192	154	129	52	*21*	46	276	120	32	*19*
Herefordshire	*18*	*22*	*142*	146	*104*	*43*	*39*	*56*	*159*	*57*	*46*	*34*
Hertfordshire	*24*	*26*	130	121	97	*39*	*17*	*20*	125	86	39	*3*
Huntingdonshire	—	*88*	*100*	*109*	*43*	—	—	—	*94*	*75*	*55*	—
Kent	51	52	281	153	144	67	47	70	255	116	32	23
Lancashire	42	41	163	138	176	94	40	38	259	119	36	22
Leicestershire	*46*	52	127	122	107	*62*	*22*	*39*	260	104	40	*11*
Lincolnshire (Holland)	*64*	—	*49*	*96*	*65*	—	*23*	—	*170*	*63*	*18*	*17*
Lincolnshire (Kesteven)	*54*	*35*	*121*	*100*	*38*	*45*	—	*37*	*180*	*97*	*37*	*13*
Lincolnshire (Lindsey)	*28*	*42*	132	95	106	*38*	*29*	*47*	215	67	*29*	*11*
London	109	82	302	210	252	128	95	103	337	174	50	25
Middlesex	55	69	279	156	143	94	52	53	284	122	36	22
Norfolk	*22*	*30*	123	113	89	*30*	*32*	*23*	146	73	*23*	*13*
Northamptonshire	*12*	*17*	95	109	119	*53*	*13*	*53*	190	80	*17*	*12*
Northumberland	76	65	198	150	177	*46*	*56*	52	327	128	22	*16*
Nottinghamshire	*47*	77	194	124	134	*35*	77	89	241	135	60	*22*
Oxford	*26*	*32*	121	165	109	*82*	*46*	*92*	209	99	*28*	*40*
Peterborough, Soke of	*114*	*70*	*135*	*79*	*55*	—	—	—	*155*	*113*	—	—
Rutlandshire	—	—	—	*37*	*51*	—	—	—	*157*	38	—	—
Shropshire	—	*19*	*80*	75	*57*	*36*	—	*20*	*38*	61	*19*	*18*
Somerset	*31*	*40*	135	126	143	*28*	*37*	*43*	198	99	31	*9*
Southampton	38	41	161	146	148	81	*28*	43	201	75	41	*16*
Staffordshire	55	64	161	145	199	84	48	86	233	114	50	25
Suffolk, East	*14*	*9*	98	100	81	*17*	*22*	*19*	165	46	50	*26*
Suffolk, West	*41*	*13*	*111*	*85*	*118*	*29*	*43*	*69*	*41*	*82*	*14*	*12*
Surrey	*29*	37	207	124	109	65	34	33	193	83	28	*13*
Sussex, East	*30*	*35*	131	145	108	68	*41*	*34*	132	80	25	*16*

Table LXII.—*continued.*

	Males						Females					
	0–	5–	15–	25–	45–	65 and over	0–	5–	15–	25–	45–	65 and over
Sussex, West	*24*	*37*	118	131	124	*66*	*25*	*14*	123	74	*33*	*12*
Warwickshire	51	54	175	123	165	91	43	52	239	104	38	*14*
Westmorland	—	*20*	*122*	*123*	*56*	—	—	—	*110*	*32*	—	—
Wight, Isle of	*78*	*68*	*74*	*88*	*188*	*34*	—	*35*	*142*	*74*	*15*	*58*
Wiltshire	*19*	*32*	215	155	119	*39*	—	*30*	210	98	*16*	—
Worcestershire	*30*	*29*	160	112	96	*44*	*14*	*19*	163	79	*25*	*22*
Yorkshire, E. Riding	*54*	*16*	177	127	120	*45*	*35*	*35*	234	103	46	*17*
Yorkshire, N. Riding	*56*	*46*	104	131	121	*38*	*72*	70	232	127	37	*10*
Yorkshire, W. Riding	50	55	129	118	138	59	49	65	193	95	26	15
Anglesey	*48*	—	*412*	*179*	*130*	*33*	—	*87*	*259*	*100*	*30*	—
Brecknockshire	—	—	*257*	*151*	*79*	*34*	*46*	—	*403*	*168*	*60*	—
Caernarvonshire	*44*	*48*	*214*	220	179	*100*	*23*	*74*	270	187	*28*	—
Cardiganshire	—	—	*47*	*42*	*16*	—	—	—	*60*	*40*	—	*21*
Carmarthenshire	*61*	*52*	170	182	134	*48*	*48*	*54*	227	115	*46*	*20*
Denbighshire	*73*	*82*	*84*	209	151	*159*	*46*	*79*	294	124	*41*	*25*
Flintshire	*16*	*49*	*188*	115	177	*102*	*34*	*59*	254	98	*63*	*11*
Glamorganshire	46	49	219	183	162	53	*36*	72	364	160	35	*16*
Merionethshire	*67*	*107*	*172*	*200*	*202*	*305*	*70*	—	*161*	*95*	*18*	—
Monmouthshire	*21*	*51*	209	151	149	*75*	*38*	69	341	138	52	*5*
Montgomeryshire	—	—	*210*	*165*	*112*	—	—	*32*	*198*	*167*	*88*	—
Pembrokeshire	—	*16*	*180*	*114*	*51*	*23*	*28*	*66*	*124*	*56*	*38*	—
Radnorshire	—	—	*184*	*32*	*45*	—	*129*	—	*153*	—	—	—

Comparing death and notification rates in 1949, for males, the notification rates reached a maximum at ages 15–24, whereas death rates reached a maximum at ages 45–64; for females, notification and death rates each attained a maximum at ages 15–24.

Table LXII shows the notification rates by sex and age for counties in England and Wales. With few exceptions, more especially in the north, the highest notification rates occurred at ages 15–24 among males, and the rates then decreased with age. Of persons examined by mass radiography up to the 31st December, 1949, 30 per cent. were in the age group 15–24, and between 1946 and 1949 the average weekly number of examinations had doubled. If it be assumed that all active cases detected by the surveys are notified, then the percentage of notified cases found by mass radiography was 6·0 in 1946, 5·7 in 1947, 7·7 in 1948 and 10·0 in 1949.

The order of ranking among the regions according to notification rates at ages 15–24, the age at which the rates were generally highest, was similar for males and females ($P = 0{\cdot}64$, $t = 2{\cdot}49$ which is significant at the 5 per cent. level). At ages 65 and over the regional rankings for men showed a high degree of correlation between notification and death rates ($P = 0{\cdot}89$, $t = 5{\cdot}89$) whereas for women the correlation coefficient was $-0{\cdot}21$, showing that the order of ranking for death rates tended to be the reverse of that for notification rates. These figures would not be unduly affected by non-civilians being included in the notification rates and excluded from the death rates.

The following table shows the equivalent average notification rates for persons aged 15–44 and the ratio of deaths per 100 notifications by sex and age for regions and for England and Wales as a whole.

Region	E.A.N.R. 15–44	Ratio of deaths per 100 notifications							
		Males				Females			
		15–	25–	45–	65 and over	15–	25–	45–	65 and over
North I	170	22	57	76	129	30	57	105	125
North II	146	23	49	88	154	33	62	87	161
North III	125	16	38	68	128	26	45	95	77
North IV	149	22	46	66	87	25	49	73	93
Midland I	144	18	49	72	101	32	51	63	117
Midland II	132	16	50	63	126	26	49	74	104
East	104	18	42	78	162	25	49	64	119
South East	171	10	28	62	112	13	32	63	107
South West	138	15	43	71	170	18	44	71	156
Wales I	202	28	45	71	138	25	48	94	178
Wales II	156	12	48	87	91	26	63	80	293
England and Wales ..	**154**	**16**	**40**	**68**	**112**	**22**	**43**	**71**	**114**

Compared with 1947, the E.A.N.R. had declined for England and Wales from 167 to 154, and this decrease was reflected in the rates for each region except North II, (Cumberland, Westmorland and the North and East Ridings) where the rate rose from 138 in 1947 to 146 in 1949. The equivalent average death rates had also declined since 1947, but in each region except Midland II and Wales II the death rate had decreased more rapidly than the notification rate, as will be seen from the following :—

Rates at 15–44		N.I	N.II	N.III	N.IV	S.E.	S.W.	Mid. I	Mid. II	East	Wales I	Wales II
E.A.N.R.	1947	188	138	126	153	189	165	157	149	123	209	200
	1949	170	146	125	149	171	138	144	132	104	202	156
E.A.D.R.	1947	91	66	56	64	52	57	65	51	47	85	70
	1949	73	64	41	54	37	43	56	49	37	75	63
Ratio per cent.	1947	48	48	44	42	28	35	41	34	38	41	35
D/N.	1949	43	44	33	36	22	31	39	37	36	37	40

Table LXIII.—Tuberculosis of Respiratory System : Ages 15–44. Numbers of Notifications and Deaths, Equivalent Average Rates per 100,000 living and Ratios of Deaths to Notifications, in Counties with and without County Boroughs, 1949.

Counties (in order of Notification rate at 15–44)	Notification rate E.A.N.R. 15–44	No. of Notifications				No. of Deaths		Death rate E.A.D.R. 15–44	Deaths per 100 Notifications 15–44
		Males		Females		Males 15–44	Females 15–44		
		15–	25–44	15–	25–44				
English counties without county boroughs :									
Middlesex	187	398	587	422	478	181	188	35·6	20
Bedfordshire	169	40	82	52	53	29	17	33·5	20
Wiltshire	155	55	79	50	51	28	22	34·7	21
Buckinghamshire	138	40	75	53	59	28	27	32·7	24
Cambridgeshire	135	28	32	17	34	13	7	26·7	18
Cornwall	131	45	47	30	56	37	31	52·1	38
Herefordshire	118	13	25	14	10	12	16	55·7	45
Lincolnshire, Kesteven	116	11	19	15	17	10	6	32·0	26
Peterborough, Soke of	112	6	8	7	11	5	2	28·3	22
Hertfordshire	112	52	114	50	83	33	35	25·8	23
Sussex, West	109	22	51	23	33	25	21	39·5	36
Huntingdonshire	94	5	11	4	7	3	5	29·2	30
Westmorland	90	6	11	5	3	6	7	48·2	52
Wight, Isle of	90	4	11	8	10	9	7	44·3	48
Lincolnshire, Holland	90	4	15	13	9	8	9	38·7	41
Dorset	89	27	26	19	26	16	16	29·6	33
Suffolk, West	81	9	14	3	13	3	7	22·2	26
Ely, Isle of	75	5	6	4	14	8	3	28·5	38
Shropshire	65	17	31	7	24	29	38	58·4	85
Rutlandshire	51	—	1	2	1	2	—	25·5	50
English counties with county boroughs :									
Northern									
Northumberland	180	121	185	185	155	108	139	71·4	38
Cumberland	166	38	57	49	59	40	58	83·7	48
Durham	165	187	306	340	269	220	261	76·0	44
Lancashire	156	564	1,071	899	940	553	671	56·3	35
Yorkshire, E. Riding	145	65	96	82	77	40	77	54·6	37
Yorkshire, N. Riding	142	39	96	82	92	54	73	60·3	41
Yorkshire, W. Riding	125	320	656	455	519	288	351	41·4	33
Cheshire	119	104	196	149	178	133	129	50·9	42
Other									
London	235	683	1,203	829	992	323	342	42·5	18
Kent	179	266	340	253	273	149	154	48·9	27
Gloucestershire	169	125	220	175	169	88	103	47·8	28
Nottinghamshire	159	119	163	137	171	103	127	63·8	39
Devon	155	104	147	118	110	73	83	51·2	33
Staffordshire	152	195	381	266	282	203	238	61·7	39
Berkshire	146	52	91	39	74	28	17	27·3	18
Warwickshire	145	215	386	290	311	244	232	57·7	40
Essex	144	257	404	288	323	148	170	36·3	25
Oxford	143	31	69	41	40	9	11	16·7	11
Leicestershire	140	58	120	111	100	63	83	53·0	38
Surrey	136	202	299	198	216	112	99	31 0	23
Southampton	134	114	223	150	129	87	85	38·7	28
Somerset	131	49	96	70	79	48	40	41·0	30
Sussex, East	119	46	113	49	71	48	43	38·8	33
Worcestershire	118	58	91	58	62	56	64	53·9	45
Lincolnshire, Lindsey	112	44	67	67	45	44	64	56·5	48
Northamptonshire	111	22	59	42	42	32	38	47·4	42
Derbyshire	109	72	153	86	92	76	55	36·2	33
Norfolk	107	44	86	50	55	36	39	35·2	32
Suffolk, East	93	21	45	34	21	19	19	30·1	31
Welsh counties :									
Brecknockshire	216	11	12	15	13	11	6	76·3	33
Caernarvonshire	216	18	37	22	34	12	18	59·0	27
Glamorganshire	212	200	334	306	290	195	208	79·8	36
Anglesey	205	14	12	8	7	6	8	71·5	34
Monmouthshire	188	70	99	102	85	58	68	70·0	35
Montgomeryshire	179	8	11	6	10	5	7	65·6	34
Denbighshire	174	10	52	31	31	8	26	47·4	27
Carmarthenshire	165	23	48	26	30	24	30	72·9	43
Merionethshire	154	5	10	4	5	8	5	88·4	54
Flintshire	145	18	24	24	21	33	17	86·1	57
Pembrokeshire	107	12	15	7	7	7	15	60·8	54
Radnorshire	67	3	1	2	—	—	—	—	—
Cardiganshire	45	2	3	2	3	8	8	77·6	160

For a detailed discussion on the significance of the difference between the notification and death rates in assessing the extent of notification, reference should be made to the 1946-47 Text Volume. Table LXIII shows the number of notifications and deaths, the E.A.N.R. and E.A.D.R. at ages 15–44 and the deaths per 100 notifications for English counties with and without county boroughs and for Welsh counties. The general picture at these ages in 1949 may be gained from the maps on pp. 104–105. Certain well defined regions stand out :—

(1) In the north there is a region with high notification and death rates, comprising Cumberland, Northumberland, Durham and Lancashire.

(2) The Welsh region and Monmouth, in which most counties had high notification and death rates. The two rural counties of Cardigan and Pembroke in the south-west of Wales had low notification and high death rates. The rates for Cardigan are based on very small numbers and it is possible that the death rates in this area are affected by the return of advanced cases who have been notified in one of the industrial areas of Carmarthen or Glamorgan.

(3) In the Midlands, Staffordshire and Nottingham had high notification and death rates.

(4) A region in the north, roughly following the Pennines and branching into the Cheshire Plain had low notification and death rates ; this comprised the counties of Westmorland, Derby, Cheshire and the West Riding.

(5) An area round the Wash and extending into the northern part of East Anglia, comprising Lincolnshire (parts of Kesteven and Holland) Rutland, Peterborough, Ely, Huntingdon, Cambridge, Norfolk and Suffolk, also had low notification and death rates while the same thing applied to

(6) A south-coast region taking in Dorset, Southampton, the Isle of Wight, and Sussex.

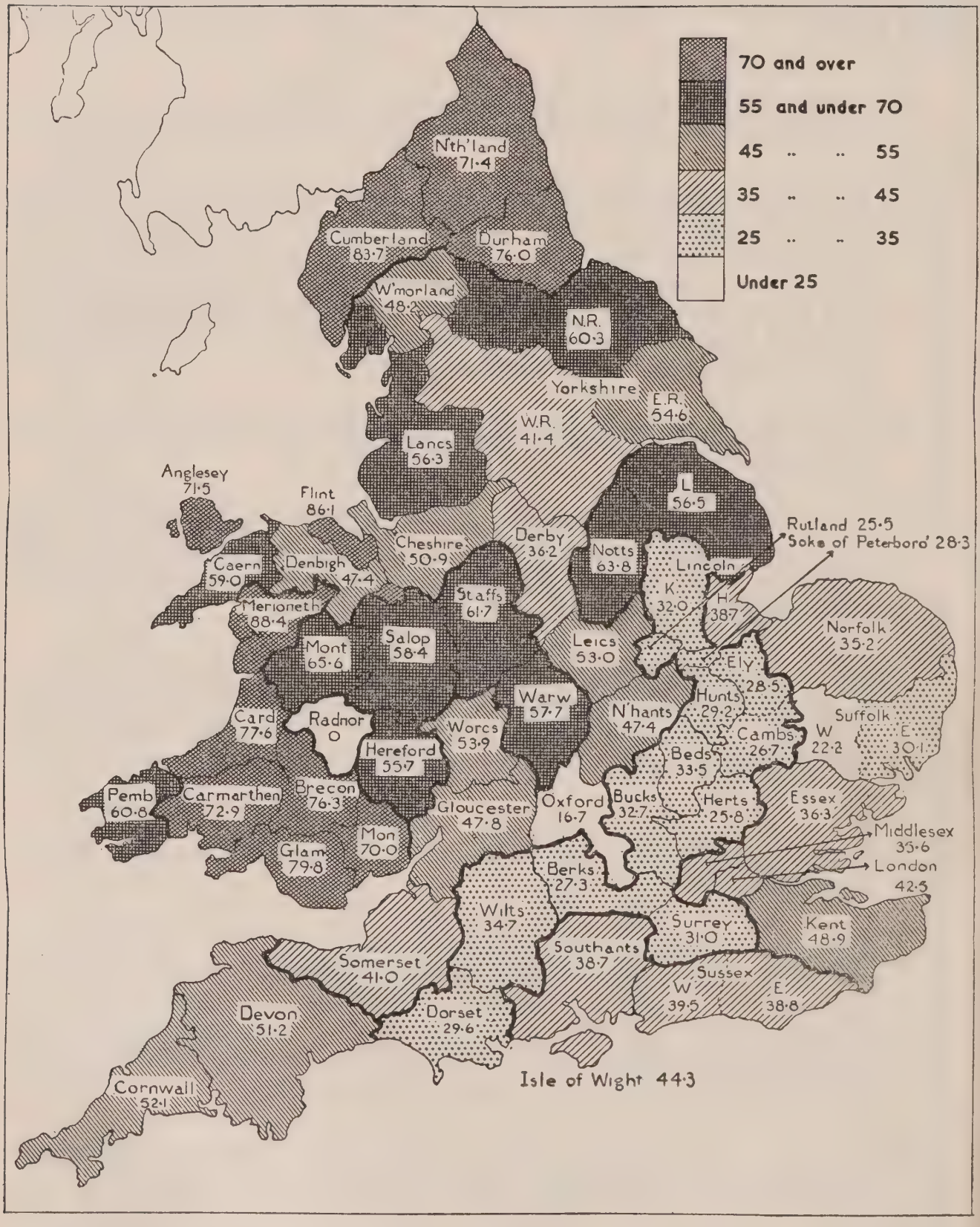
(7) London, Kent and Middlesex form an area with high notification and low death rates. This may be partly accounted for by a general tendency in London and Middlesex to notify all doubtful cases of a disease. There may also be in these areas a considerable number of young people from the provinces who have poor living conditions, and low wages, and in whom the incidence may be high.

(8) Leicester, Northampton, Oxford, Buckingham, Berkshire and Surrey form a region with medium notification and low death rates.

(9) In Devon, Somerset and Wiltshire the notification rates are fairly high while the death rates are about average.

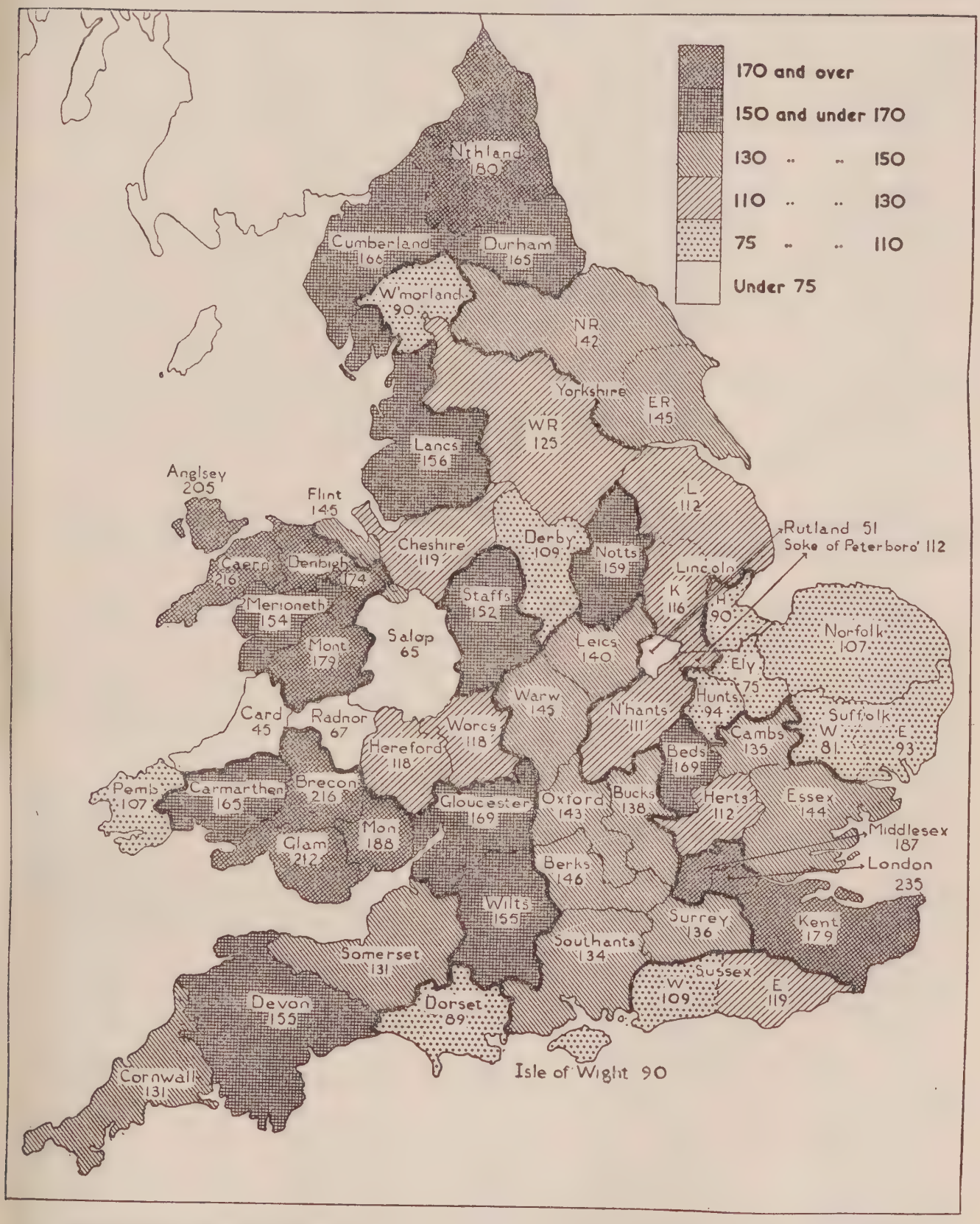
(10) Hereford and Shropshire which are also mainly rural counties have on the contrary low notification and high death rates.

Diagram 4



Equivalent average death rate at ages 15-44 (rate per 100,000 living), 1949.

Diagram 5



Equivalent average notification rate at ages 15-44 (rate per 100,000 living), 1949.

Table LXIV.—Tuberculosis of Respiratory System: Ages 45 and over. Numbers of Notifications and Deaths. 1949.

Counties (in order of Male Notification rates at 45–64)	Males							Females			
	Population (45–64) at the end of 1947	No. of Notifications		No. of Deaths		Rate per 100,000 at 45–64		No. of Notifications		No. of Deaths	
		45–	65 and over	45–	65 and over	Notifications	Deaths	45–	65 and over	45–	65 and over
English Counties without county boroughs:											
Wight, Isle of	9,960	19	2	7	1	188	70	2	5	1	1
Bedfordshire	32,653	60	9	26	8	179	80	21	4	11	6
Middlesex	251,999	370	80	224	77	143	89	106	29	66	25
Dorset	29,542	41	5	19	6	134	64	10	3	2	6
Sussex, West	31,226	40	13	24	7	124	77	15	4	2	3
Wiltshire	38,923	48	7	23	10	119	59	7	—	3	4
Suffolk, West	12,405	15	2	8	4	118	65	2	1	2	2
Herefordshire	12,964	14	3	13	2	104	100	7	3	10	3
Hertfordshire	61,841	62	10	39	15	97	63	29	1	16	2
Cambridgeshire	17,482	17	3	12	6	94	69	7	3	3	2
Buckinghamshire	39,502	36	5	26	9	88	66	15	4	6	4
Cornwall	37,222	32	5	27	15	84	73	14	4	11	4
Lincolnshire, Holland	10,413	7	—	6	2	65	58	2	1	1	—
Shropshire	28,865	17	5	18	8	57	62	6	3	2	3
Westmorland	6,991	4	—	—	1	56	—	—	—	2	4
Peterborough, Soke of	6,780	4	—	2	—	55	30	—	—	1	—
Ely, Isle of	9,669	5	3	—	2	51	—	2	—	4	1
Rutlandshire	1,922	1	—	—	1	51	—	—	—	—	1
Huntingdonshire	6,555	3	—	—	1	43	—	4	—	1	2
Lincolnshire, Kesteven	12,773	5	3	7	2	38	55	5	1	3	1
English Counties with County Boroughs:											
Northern											
Northumberland	85,602	157	17	106	26	177	124	22	7	31	5
Lancashire	552,925	1006	206	663	172	176	120	250	71	189	57
Durham	153,897	257	34	207	40	162	135	55	11	49	17
Yorkshire, W. Riding	399,293	563	94	385	119	138	96	122	32	115	25
Cumberland	29,940	38	7	31	9	123	104	16	2	11	2
Yorkshire, N. Riding	51,447	64	9	51	20	121	99	22	3	17	5
Yorkshire, E. Riding	51,814	64	10	67	10	120	129	28	5	27	5
Cheshire	136,896	165	40	107	40	116	78	47	10	29	17
Other											
London	350,262	907	186	489	230	252	140	223	56	134	55
Staffordshire	163,658	336	53	218	54	199	133	92	20	51	20
Warwickshire	190,988	326	65	245	60	165	128	84	14	42	23
Southamptonshire	117,276	180	46	123	43	148	105	59	13	37	17
Kent	162,785	241	50	151	56	144	93	63	25	46	27
Somerset	59,690	88	8	51	11	143	85	23	4	11	8
Berkshire	41,497	58	17	27	15	137	65	23	4	14	4
Nottinghamshire	87,499	121	12	67	28	134	77	61	10	36	4
Gloucestershire	97,479	130	22	88	26	129	90	37	12	33	16
Northamptonshire	40,081	49	10	41	13	119	102	8	3	9	3
Essex	211,395	242	49	208	84	110	98	55	17	60	20
Oxford	26,810	30	10	12	8	109	45	9	7	1	7
Surrey	174,173	196	46	140	37	109	80	62	14	34	22
Derbyshire	90,648	101	19	66	19	108	73	27	5	23	8
Sussex, East	63,179	70	25	53	27	108	84	23	10	16	12
Leicestershire	66,878	74	17	64	13	107	96	32	4	26	8
Lincolnshire, Lindsey	48,727	54	9	44	15	106	90	16	3	7	4
Worcestershire	54,577	54	10	51	10	96	93	16	7	12	5
Norfolk	56,699	52	9	47	15	89	83	15	5	17	8
Devon	86,065	75	10	81	18	85	94	31	12	34	15
Suffolk, East	33,655	28	3	22	5	81	65	20	6	8	3
Welsh Counties:											
Merionethshire	4,351	9	7	8	2	202	184	1	—	3	—
Caernarvonshire	13,787	25	7	29	13	179	210	5	—	1	4
Flintshire	14,595	27	7	29	5	177	199	11	1	6	2
Glamorganshire	134,400	226	29	148	50	162	110	51	10	58	13
Denbighshire	18,726	29	14	12	6	151	64	9	3	5	3
Monmouthshire	47,983	74	15	59	11	149	123	26	1	22	4
Carmarthenshire	20,394	28	4	24	5	134	118	10	2	4	5
Anglesey	5,127	7	1	5	1	130	98	2	—	3	—
Montgomeryshire	5,223	6	—	3	3	112	57	5	—	4	2
Brecknockshire	6,191	5	1	4	1	79	65	4	—	1	1
Pembrokeshire	9,539	5	1	8	1	51	84	4	—	6	2
Radnorshire	2,167	1	—	1	1	45	46	—	—	—	—
Cardiganshire	5,995	1	—	1	2	16	17	—	1	2	1

Table LXIV shows numbers of notifications and deaths at ages 45–64 and 65 and over in counties, these being grouped as in Table LXIII, and arranged in diminishing order of notification rates. For males aged 45–64 the notification and death rates in the twenty English counties without county boroughs, that is, those with a single administrative authority for tuberculosis in each county, showed a rank correlation coefficient of 0·79. Excluding the eight northern counties with county boroughs the degree of correlation in ranking for the remaining 21 was only 0·47. London had the highest notification rate at ages 45–64, the rate being 252 compared with 226 in 1947 ; the death rate however had declined from 160 in 1947 to 140 in 1949. The group of northern counties, Northumberland, Durham, Cumberland and Lancashire, which had high notification rates for men at ages 15–44, also had high notification and death rates for those aged 45–64. The average of their notification rates, 160, was, however, only 63 per cent. of the London rate, while the average death rate of 121 was 86 per cent. of the London rate. In 1947 Warwickshire also had higher notification and death rates for men aged 45–64 than any of the northern counties but in 1949 its rates were exceeded by those of Staffordshire, where the notification rate exceeded that of any northern county and the death rate was only exceeded among the eight northern counties by that of Durham.

Among the Welsh counties, Glamorgan's notification rate for men aged 45–64 increased from 127 in 1947 to 162 in 1949, while the death rate declined from 129 to 110. In Monmouth the notification rate increased from 108 to 149 and the death rate rose at the same time from 106 to 123.

Table LXVa.—Tuberculosis of the Meninges and Central Nervous System and other Non-Respiratory Tuberculosis : Death rates by Sex and Age per million living in Regions. 1948.

Region	Tuberculous Meningitis						Other Non-Respiratory Tuberculosis					
	Males			Females			Males			Females		
	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over
England and Wales	**179**	**47**	**11**	**166**	**54**	**12**	**57**	**20**	**42**	**56**	**18**	**33**
Regional Summary :												
South East	110	40	10	107	44	12	41	*20*	43	*22*	*9*	29
Greater London	105	40	10	117	58	12	*28*	*12*	43	*21*	*10*	27
Remainder of South East	115	*39*	11	95	*29*	12	*58*	*30*	43	*23*	*7*	31
North	241	54	13	215	54	12	63	24	40	73	26	35
North I	356	*66*	*23*	323	*106*	*19*	*59*	*30*	58	*73*	*50*	42
North II	*197*	*70*	*16*	*172*	*42*	*11*	*66*	*20*	*39*	*138*	*10*	50
North III	219	*29*	*7*	155	*43*	*10*	*71*	*25*	37	*47*	*26*	31
North IV	221	59	13	218	*44*	12	*59*	*21*	37	*74*	*19*	33
Midland	186	58	7	193	56	10	66	*22*	39	80	*21*	29
Midland I	167	59	*6*	193	*45*	10	*65*	*22*	37	86	*31*	24
Midland II	223	*55*	*9*	191	*80*	*8*	*66*	*22*	42	*70*	—	38
East	*161*	*15*	*11*	*133*	*100*	*14*	*80*	*7*	47	*84*	*15*	39
South West	*106*	*33*	*14*	*169*	*49*	*16*	*53*	—	51	*34*	*14*	48
Wales	296	*61*	*17*	*175*	*57*	*18*	*74*	*28*	48	*78*	*17*	33
Wales I	354	*85*	*17*	*173*	*48*	*21*	*63*	*38*	43	*93*	*16*	32
Wales II	*138*	—	*15*	*179*	*82*	*10*	*103*	—	*60*	*36*	*20*	*37*
Density Summary :												
County boroughs*	264	55	11	182	70	15	67	*21*	42	58	*20*	36
Other urban districts*	162	52	12	183	47	11	54	21	42	67	*18*	31
Rural districts*	139	*34*	12	159	*35*	10	75	*25*	42	70	*21*	35

* Excluding Greater London.

Table LXVb.—Tuberculosis of the Meninges and Central Nervous System and other Non-Respiratory Tuberculosis : Death rates by Sex and Age per million living in Regions, 1949.

Area	Tuberculous Meningitis						Other Non-Respiratory Tuberculosis					
	Males			Females			Males			Females		
	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over
England and Wales	**153**	**40**	**9**	**126**	**40**	**11**	**34**	**15**	**38**	**33**	**8**	**25**
Regional Summary :												
South East	108	43	8	88	28	7	*13*	*11*	34	*15*	*5*	21
Greater London	93	47	8	77	*20*	8	*3*	*8*	36	*18*	*4*	21
Remainder	128	*38*	9	101	*37*	*5*	*25*	*16*	31	*11*	*7*	20
North	197	39	12	170	51	14	48	*19*	45	49	*9*	29
North I	221	*42*	*11*	276	*49*	*18*	*29*	*18*	48	*31*	*6*	40
North II	*177*	*39*	*6*	*186*	*102*	*9*	—	*10*	47	*17*	—	*32*
North III	177	*29*	*10*	173	*42*	*10*	*63*	*20*	39	*80*	*17*	25
North IV	203	*44*	14	126	*45*	15	*58*	*21*	46	*46*	*7*	26
Midland	171	41	*6*	117	55	15	*41*	*14*	33	*49*	*13*	26
Midland I	180	*50*	*7*	129	65	*14*	*41*	*16*	37	*56*	*14*	27
Midland II	*154*	*22*	*6*	*95*	*34*	*17*	*41*	*11*	25	*34*	*11*	23
East	*146*	*22*	*8*	*48*	*15*	*6*	*45*	*14*	38	—	*8*	*15*
South West	*105*	*65*	*11*	*165*	*48*	*8*	*11*	*6*	31	*22*	*14*	28
Wales	*164*	*22*	*15*	*162*	*17*	*13*	*64*	*16*	55	*38*	*6*	34
Wales I	*173*	*30*	*14*	*182*	*23*	*14*	*62*	*23*	52	*52*	*8*	33
Wales II	*138*	—	*15*	*107*	—	*10*	*69*	—	*63*	—	—	*36*
Density Summary :												
County boroughs*	182	41	12	146	56	14	47	*17*	40	39	*14*	27
Other urban districts*	148	43	10	135	49	10	*27*	*16*	36	*33*	*4*	24
Rural districts*	174	*28*	*6*	120	*20*	9	57	*16*	40	*39*	*11*	26

* Excluding Greater London.

Regional Distribution of Non-Respiratory Tuberculosis.—Table LXV shows the death rates at ages under 5, 5–14 and 15 and over from tuberculosis of the meninges and nervous system and from other non-respiratory tuberculosis for the regions and also for county boroughs, other urban districts and rural districts for 1948 and 1949. For tuberculous meningitis in 1948 and 1949 the northern districts showed high rates for both boys and girls under 5, the rate in North I for boys being nearly twice that for the country as a whole in 1948 and one-and-a-half times in 1949, and for girls about twice the national rate in both years. The rates for Greater London were 59 and 61 per cent. of the national rate for boys under 5 and 70 and 61 per cent. for girls. Rates for tuberculous meningitis in county boroughs were still in excess of those in rural districts for children under 15 in both years, but for other non-respiratory tuberculosis the rural districts had higher rates than the county boroughs at ages under 15. For the most part there had been a decrease in the regional rates at different ages between 1947 and 1949. The following table shows the 1949 rates as percentages of the corresponding rates for 1947.

Area	Tuberculous Meningitis						Other Non-Respiratory Tuberculosis					
	Males			Females			Males			Females		
	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over
England and Wales	**73**	**59**	**69**	**70**	**61**	**79**	**38**	**52**	**84**	**52**	**30**	**66**
South East	89	86	80	70	57	64	27	69	81	38	25	57
North	63	44	86	65	68	100	43	50	100	67	25	78
Midland	84	58	40	86	74	94	35	42	80	58	68	65
East	69	73	80	32	24	30	64	31	93	—	35	58
South West	64	108	73	96	69	33	11	15	56	24	50	68
Wales	65	28	65	71	21	81	48	94	83	43	13	69
County boroughs*	71	53	86	65	71	88	39	45	87	45	42	68
Other urban districts*	61	59	63	71	77	67	31	55	84	57	13	69
Rural districts*	99	65	67	78	34	56	66	57	82	52	73	68

* Excluding Greater London.

Table LXVIa.—Tuberculosis of the Meninges and Central Nervous System and Other Non-Respiratory Tuberculosis : Equivalent Average Death Rates per million living at Ages 0–14 in Counties (including associated County Boroughs). 1948.

English counties without county boroughs	E.A.D.R. 0–14		English counties with county boroughs	E.A.D.R. 0–14		English counties with county boroughs	E.A.D.R. 0–14	
	Meningitis	Other		Meningitis	Other		Meningitis	Other
Bedfordshire	*26*	*63*	*Northern*			Southampton ..	*72*	*17*
Buckinghamshire ..	*23*	*12*	Cheshire	80	*38*	Staffordshire	80	*38*
Cambridgeshire ..	*63*	*37*	Cumberland ..	*75*	*14*	Suffolk, East	*61*	*13*
Cornwall	*101*	*39*	Durham	198	61	Surrey	*56*	*3*
Dorset	*52*	—	Lancashire	116	36	Sussex, East	*95*	*34*
Ely, Isle of	—	*46*	Northumberland ..	125	*27*	Warwickshire ..	109	*41*
Herefordshire	—	*71*	Yorkshire, E. Riding	*103*	*45*	Worcestershire ..	*108*	*50*
Hertfordshire	*47*	*7*	Yorkshire, N. Riding	*99*	*66*			
Huntingdonshire ..	*79*	—	Yorkshire, W. Riding	87	37	Welsh counties		
Lincolnshire, Holland	*87*	*39*						
Lincolnshire, Kesteven	*31*	—	*Other*			Anglesey	—	*84*
Middlesex	74	*11*	Berkshire	*75*	*22*	Brecknockshire ..	*164*	*85*
Peterborough, Soke of	—	—	Derbyshire	*77*	*36*	Caernarvonshire ..	*114*	*37*
Rutlandshire	—	—	Devon	*93*	*11*	Cardiganshire ..	—	—
Shropshire	*105*	*46*	Essex	53	*16*	Carmarthenshire ..	*145*	*115*
Suffolk, West	*35*	*117*	Gloucestershire ..	101	*48*	Denbighshire	*55*	*82*
Sussex, West	*63*	—	Kent	74	*49*	Flintshire	*68*	—
Westmorland	*205*	—	Leicestershire ..	*128*	*33*	Glamorganshire ..	129	*24*
Wight, Isle of	—	—	Lincolnshire, Lindsey	*138*	*8*	Merionethshire ..	—	—
Wiltshire	*65*	*49*	London	76	*25*	Monmouthshire ..	*136*	*70*
			Norfolk	*113*	*71*	Montgomeryshire ..	*194*	—
			Northamptonshire ..	*59*	—	Pembrokeshire ..	*149*	—
			Nottinghamshire ..	175	*38*	Radnorshire	*220*	—
			Oxford	*15*	*20*			
			Somerset	*50*	*10*	**England and Wales ..**	**92**	**32**

Table LXVIb.—Tuberculosis of the Meninges and Central Nervous System and Other Non-Respiratory Tuberculosis : Equivalent Average Death Rates per million living at Ages 0–14 in Counties (including associated County Boroughs). 1949.

English counties without county boroughs	E.A.D.R. 0–14		English counties with county boroughs	E.A.D.R. 0–14		English counties with county boroughs	E.A.D.R. 0–14	
	Meningitis	Other		Meningitis	Other		Meningitis	Other
Bedfordshire	*119*	*17*	*Northern*			Southampton ..	92	*18*
Buckinghamshire ..	*25*	*25*				Staffordshire	104	*30*
Cambridgeshire ..	*52*	—	Cheshire	81	*27*	Suffolk, East	*12*	—
Cornwall	*128*	*16*	Cumberland ..	*125*	*15*	Surrey	*51*	*3*
Dorset	*79*	*15*	Durham	125	*26*	Sussex, East	*41*	—
Ely, Isle of	—	*90*	Lancashire	89	28	Warwickshire ..	76	*20*
Herefordshire	*64*	*38*	Northumberland ..	*96*	*10*	Worcestershire ..	*108*	*17*
Hertfordshire	*75*	*8*	Yorkshire, E. Riding	*77*	*9*			
Huntingdonshire ..	—	—	Yorkshire, N. Riding	*151*	*8*	Welsh counties		
Lincolnshire, Holland	*38*	—	Yorkshire, W. Riding	84	37			
Lincolnshire, Kesteven	*32*	*32*				Anglesey	—	—
Middlesex	56	*2*				Brecknockshire ..	*231*	—
Peterborough, Soke of	—	—	*Other*			Caernarvonshire ..	*114*	*38*
Rutlandshire	—	—				Cardiganshire ..	*183*	—
Shropshire	*43*	*48*	Berkshire	*21*	*10*	Carmarthenshire ..	*87*	*136*
Suffolk, West	*71*	*46*	Derbyshire	*34*	*47*	Denbighshire	*26*	—
Sussex, West	*61*	*33*	Devon	*98*	*12*	Flintshire	*29*	—
Westmorland	—	—	Essex	51	*10*	Glamorganshire ..	*66*	*26*
Wight, Isle of	—	—	Gloucestershire ..	*71*	*28*	Merionethshire ..	—	*117*
Wiltshire	*40*	*11*	Kent	67	*7*	Monmouthshire ..	*95*	*9*
			Leicestershire ..	*101*	*14*	Montgomeryshire ..	—	—
			Lincolnshire, Lindsey	*84*	*21*	Pembrokeshire ..	—	—
			London	55	*16*	Radnorshire	—	—
			Norfolk	*47*	*8*			
			Northamptonshire ..	*36*	*22*			
			Nottinghamshire ..	*75*	—			
			Oxfordshire	*30*	*46*			
			Somerset	*77*	*9*	**England and Wales** ..	**75**	**20**

Mortality from tuberculous meningitis, with few exceptions, decreased in the regions during the two years. The decrease in the North at ages under 15 was considerable, whereas in the South East, which includes Greater London, although the rates for girls declined considerably, the decrease in boys' rates was not as great.

Table LXVI shows the equivalent average death rates per million at ages under 15. If those counties with a population of 250,000 or more are considered, there were in 1949 four counties with rates for tuberculous meningitis of 125 or over, namely the North Riding, Cornwall, Cumberland and Durham, while four others, Bedford, Worcester, Stafford and Leicester had rates between 100 and 124. The counties with rates of 45 or less were Berkshire, Buckingham, Derby, Oxford, Northampton, Shropshire, East Suffolk, East Sussex and Wiltshire.

27. Dysentery.—Deaths from dysentery numbered 61 in 1948 and 40 in 1949, the lowest annual totals yet recorded (Table LXVII). This decrease in numbers of deaths was not accompanied by any corresponding improvement in notifications. Though fewer than in 1941–1946 notifications underwent an increase from 3,761 in 1947 to 5,084 in 1948 and 4,519 in 1949. Of the total deaths in 1948–49 a fifth were certified due to amœbic and three-fifths to bacillary dysentery.

Table LXVII.—Dysentery : Deaths and Notifications, 1931 to 1949.

Year	Number of notifications (all forms of dysentery)	Number of deaths registered					Ratio of notifications to deaths (all forms)
		Amœbic dysentery	Bacillary dysentery	Unspecified or other dysentery	Total not specified as amœbic	All forms	
1931	836	8	40	47	87	95	8·8
1932	924	2	46	61	107	109	8·5
1933	783	5	37	33	70	75	10·4
1934	763	7	37	41	78	85	9·0
1935	1,177	8	55	32	87	95	12·4
1936	1,333	6	43	23	66	72	18·5
1937	4,167	6	61	44	105	111	37·5
1938	4,170	10	62	40	102	112	37·2
1939	1,941	10	63	23	86	96	20·2
1940	2,860	4	142	39	181	185	15·5
1941	6,670	15	244	70	314	329	20·3
1942	7,296	8	130	60	190	198	36·8
1943	7,905	6	88	30	118	124	63·8
1944	(*a*) 13,346 (*b*) 13,000	9	102	46	148	157	82·8
1945	(*a*) 16,774 (*b*) 16,247	11	113	41	154	165	98·5
1946	(*a*) 8,459 (*b*) 7,870	17	55	49	104	121	65·0
1947	(*a*) 4,168 (*b*) 3,761	16	48	17	65	81	46·4
1948	(*a*) 5,496 (*b*) 5,084	11	34	16	50	61	83·3
1949	(*a*) 4,875 (*b*) 4,519	8	25	7	32	40	113·0

(*a*) Original notifications. (*b*) Fully corrected for diagnosis revision.

The ratio of notifications to deaths continued to increase and by 1949 reached a level of 113 to 1 ; or expressing this relationship in the usual form of fatality rate, there were less than 10 deaths per 1,000 cases notified. It is probable that formerly notifications of dysentery were grossly incomplete and that some improvement in this respect has taken place in the last few years, but it is not possible to determine how much the apparent reduction in fatality can be attributed to this factor and how much to the introduction of sulphonamide therapy or to reduced severity of the infection.

Table LXVIII.—Dysentery : Corrected Notification and Fatality Rates by Sex and Age, 1946 to 1949.

	1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
	Notifications* per 100,000 living							
Civilians								
0– ..	57	48	26	21	55	48	53	49
5– ..	25	24	7	5	18	17	18	15
15– ..	14	15	7	6	6	7	4	6
45– ..	12	13	9	10	5	6	3	5
65 and over	14	20	11	11	7	10	3	8
All ages ..	**19**	**19**	**9**	**8**	**12**	**12**	**10**	**11**
Non-civilians	164†	18†	44†	6†	12†	1†	5†	1†
	Deaths per 1,000 notifications*							
Civilians								
0– ..	21	13	38	11	10	5	7	3
5– ..	4	2	5	8	6	2	4	—
15– ..	23	2	29	9	22	3	21	7
45– ..	27	4	20	17	36	32	26	11
65 and over	34	48	19	37	14	33	63	22
All ages ..	**20**	**10**	**26**	**16**	**14**	**10**	**12**	**6**
Non-civilians	43	—	91	—	83	—	—	—

* Fully corrected for diagnosis revision.

† Number of notifications in England and Wales.

Notification rates by sex and age are shown in Table LXVIII. As usual incidence was highest in 1948 and 1949 amongst children under 5, with the customary male excess at these ages. Compared with 1946 absence of reduction at ages under 5 in 1948–49 contrasted with considerable reduction at all higher ages. The ratio of deaths to notifications in 1949 was much higher among males than among females at each age.

30. Syphilis.—Including under this title deaths from locomotor ataxia, general paralysis of the insane, aortic aneurysm and other sequelæ of syphilis, the C.M.I., which was 2·007 in 1901–10, 1·765 in 1911–20, 1·303 in 1921–30, and 1·041 in 1931–40, continued its regular downward trend and was 0·593 in 1947, 0·524 in 1948 and 0·518 in 1949. The actual numbers of deaths registered in these last three years were 2,302, 2,076, and 2,055, respectively. As the indices listed in Table LXIX indicate, improvement has taken place to much the same extent in each sex, though rather more in males than females.

Table LXIX.—Syphilis and Diseases of Syphilitic Origin : Death rates and Total Comparative Mortality Indices, 1931 to 1949.

	Death rate per million living*										C.M.I.† (1938 base year)	
	Locomotor ataxia		G.P.I.		Aneurysm of aorta		Congenital syphilis		Other and unspecified		All forms.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.
1931 ..	23	4	44	11	38	10	10	8	35	13	1·257	1·028
1932 ..	26	5	40	10	37	10	9	7	30	13	1·183	1·015
1933 ..	24	5	36	10	35	12	7	6	33	13	1·125	1·056
1934 ..	20	4	36	10	37	12	6	5	33	11	1·091	0·971
1935 ..	22	4	33	10	38	13	6	4	35	11	1·087	0·975
1936 ..	20	4	30	10	40	14	6	4	32	12	1·025	0·978
1937 ..	18	4	27	11	38	16	5	3	34	13	0·983	1·037
1938 ..	18	4	28	9	38	16	4	3	37	13	1·000	1·000
1939 ..	18	4	28	8	35	14	4	3	35	13	0·963	0·966
1940 ..	17	4	28	9	34	13	4	3	32	13	0·919	0·902
1941 ..	15	4	29	9	33	13	4	4	31	12	0·890	0·888
1942 ..	12	3	25	8	32	13	4	3	32	12	0·838	0·795
1943 ..	12	3	21	7	30	14	5	4	29	12	0·772	0·818
1944 ..	11	2	18	6	28	15	4	3	25	11	0·695	0·761
1945 ..	11	2	16	6	29	12	3	4	23	9	0·648	0·662
1946 ..	9	2	16	6	32	13	4	3	23	9	0·636	0·671
1947 ..	8	2	14	5	33	15	2	2	20	8	0·578	0·643
1948 ..	5	1	10	3	31	14	2	2	20	8	0·513	0·562
1949 ..	5	1	8	3	32	15	2	2	19	8	0·499	0·553

* Including deaths of non-civilians in England and Wales; based on total population inclusive of armed forces at home and abroad in 1940 to 1947, and on the mid-year population in 1939. Rates in 1931 to 1939 are corrected to 1940 classification.

† Civilians only from September 3rd, 1939 (Males) and from 1st June, 1941 (Females).

The death rates in 1948 and 1949 from locomotor ataxia and from general paralysis continued their gradual decline, but once again no reduction took place in deaths from aortic aneurysm which has recently been responsible for half of the deaths assigned to the whole group of syphilitic diseases.

Table LXX.—Syphilis and Diseases of Syphilitic Origin : Mean Annual Death Rates by Sex and Age, 1940–45, 1948 and 1949.

Age	Locomotor ataxia		G.P.I.		Aneurysm of aorta		Congenital syphilis		Other and unspecified		All forms of syphilis	
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.
	Death rate per million living, 1940–45*											
0–	—	—	1	0	0	0	16	14	0	—	**17**	**14**
15–	0	—	4	2	1	1	2	2	3	2	**9**	**6**
25–	0	0	6	3	2	1	1	1	6	3	**15**	**8**
35–	3	1	25	11	9	3	0	1	18	10	**55**	**25**
45–	17	5	67	20	45	11	0	0	55	23	**184**	**60**
55–	50	10	66	18	115	29	0	0	101	30	**332**	**88**
65 and over ..	63	10	29	5	146	74	0	0	90	24	**327**	**114**
All Ages ..	**13**	**3**	**23**	**7**	**31**	**13**	**4**	**3**	**28**	**11**	**99**	**39**
	Death rate per million living, 1948*											
0–	—	—	1	—	—	—	9	8	—	—	**9**	**8**
15–	—	—	2	0	1	—	1	—	1	1	**4**	**2**
25–	—	0	2	2	2	0	1	1	2	1	**7**	**5**
35–	1	0	8	2	8	1	—	—	12	5	**28**	**8**
45–	4	3	21	10	32	11	0	—	30	14	**87**	**38**
55–	21	4	36	7	106	27	—	0	77	21	**240**	**59**
65 and over ..	28	4	17	2	160	78	—	—	74	25	**279**	**110**
All Ages ..	**5**	**1**	**10**	**3**	**31**	**14**	**2**	**2**	**20**	**8**	**68**	**29**
	Death rate per million living, 1949*											
0–	—	—	—	0	0	—	7	6	—	—	**8**	**7**
15–	—	—	2	—	1	—	0	0	0	—	**3**	**0**
25–	—	—	1	1	2	1	1	0	2	2	**6**	**3**
35–	0	—	5	3	4	4	—	0	8	2	**17**	**9**
45–	4	1	15	10	31	10	—	—	29	13	**80**	**35**
55–	21	5	27	6	114	28	—	—	69	21	**230**	**60**
65 and over ..	30	1	21	3	174	84	1	0	81	25	**307**	**114**
All Ages ..	**5**	**1**	**8**	**3**	**32**	**15**	**2**	**2**	**19**	**8**	**67**	**28**

* Including deaths of non-civilians in England and Wales; based on total population inclusive of armed forces at home and abroad.

Table LXX compares death rates by sex and age in 1940–45, 1948, and 1949. Rates in 1949 from aneurysm of aorta and from all other forms of syphilis are expressed in the table below per cent. of the corresponding rates in 1940–45 :—

	Aneurysm of Aorta		*All other forms of syphilis*	
	M.	F.	M.	F.
0–	—	—	47	50
15–	100	—	25	—
25–	100	100	31	29
35–	44	133	28	23
45–	69	91	35	51
55–	99	97	53	54
65 and over	119	114	73	75
All ages	**103**	**115**	**51**	**50**

Although there has been some reduction in mortality from aneurysm of the aorta among males of middle adult ages, this has been overshadowed by increased mortality at ages 65 and over. Reduction in mortality from other forms of syphilis has taken place at all ages, and to the same extent in each sex.

Table LXXI.—Syphilis and Diseases of Syphilitic Origin : Death Rates per million living in Regions and different classes of Area by Sex and Ages 45–64, 65 and over, 1948 and 1949.

Area	45–64				65 and over			
	Males		Females		Males		Females	
	1948	1949	1948	1949	1948	1949	1948	1949
England and Wales	**153**	**144**	**47**	**46**	**279**	**307**	**110**	**114**
Regional Summary :								
South East	175	154	55	56	392	410	156	153
Greater London	200	180	61	57	467	491	201	208
Remainder of South East	142	121	47	54	316	327	108	94
North	162	155	51	53	247	249	85	91
North I	152	166	26	52	222	190	52	77
North II	120	167	37	37	258	258	99	60
North III	180	174	43	58	229	285	108	106
North IV	165	138	66	55	265	247	79	93
Midland	128	120	43	32	195	249	92	94
Midland I	141	115	35	35	229	281	75	73
Midland II	105	130	57	27	133	190	123	134
East	127	134	30	33	187	330	68	104
South West	137	85	26	23	232	230	73	82
Wales	96	151	31	19	185	256	74	86
Wales I	108	157	40	22	224	294	52	111
Wales II	62	134	10	10	103	175	115	38
Density Summary :								
County boroughs*	180	196	53	61	330	352	120	129
Other urban districts* ..	132	111	45	38	218	257	79	83
Rural districts*	99	78	27	22	159	180	57	50

* Excluding Greater London.

The regional and density comparison of mortality (Table LXXI) once more demonstrates the wide difference between urban and rural areas, with rates in the county boroughs double those in the rural districts. Especially among males the death rates recorded in Greater London far exceeded those in other parts of the country though the female rate at ages 45–64 was slightly higher in the North IV region in 1948 and in the North III region in 1949.

32a. Spirochætosis ictero-hæmorrhagica (Weil's disease).—Deaths from this disease each year since 1931 are shown in the table below :—

	Male	Female		Male	Female		Male	Female
1931 ..	3	—	1938 ..	9	1	1945 ..	23	2
1932 ..	6	1	1939 ..	14	1	1946 ..	8	2
1933 ..	—	1	1940 ..	18	—	1947 ..	12	4
1934 ..	8	—	1941 ..	15	—	1948 ..	13	3
1935 ..	11	3	1942 ..	13	2	1949 ..	36	1
1936 ..	9	—	1943 ..	9	5			
1937 ..	15	2	1944 ..	17	3			

The total of 37 deaths in 1949 represented the highest annual mortality so far attributed to this disease, the previously highest total being 25 deaths in 1945.

Distribution of deaths by sex and age is given in Table LXXII.

Table LXXII.—Spirochætosis ictero-hæmorrhagica (Weil's Disease) : Deaths by Sex and Age of Civilians and Non-civilians, 1931–35, 1936–39, 1940–43 and each year 1944 to 1949.

Ages	1931–35*		1936–39*		1940–43		1944		1945		1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
0–	—	1	1	—	4	2	—	—	—	—	—	—	—	1	—	1	—	—
15–	4	3	1	1	12	1	3	1	—	1	3	1	—	1	2	—	1	—
25–	5	—	11	—	13	1	2	1	7	—	3	1	2	—	—	—	3	—
35–	4	—	5	2	14	—	3	—	4	—	3	—	6	1	4	—	8	1
45–	7	—	15	1	11	1	6	1	6	—	3	—	3	—	6	—	11	—
55–	6	—	11	1	9	1	5	—	9	—	2	—	—	—	2	1	7	—
65 and over ..	3	1	3	1	5	1	2	—	1	1	—	—	2	1	—	1	6	—
All ages .. .	**29**	**5**	**47**	**6**	**68**	**7**	**21**	**3**	**27**	**2**	**14**	**2**	**13**	**4**	**14**	**3**	**36**	**1**

* According to classification in use in 1931–1939. Deaths at all ages of males in 1931–35 were 28 by 1940 classification and deaths of females in 1936–39 were 4.

33. Influenza.—Fewer deaths from influenza were registered in 1948 than in any previous year for which records are available, a total of 1,240 compared with 2,686 in 1945 (the previously lowest annual total), 5,290 in 1946, and 3,310 in 1947. Deaths in 1949, when there was an epidemic of moderate severity early in the year, numbered 5,658. In 1948, however, influenza virus was not detected anywhere in the country throughout the winter. Moreover, the weather that winter was exceptionally mild, so that deaths from respiratory infections of types sometimes described on death certificates as influenza or influenzal (without evidence of infection by influenza virus) were much fewer than usual. The comparative mortality index in 1948 was 0·236 (male) and 0·229 (female) ; but returned to 0·914 (male) and 1·184 (female) in 1949.

Although epidemics of influenza of greater or less severity occur every few years there has been a general downward trend of mortality during the past thirty years. This is illustrated by the annual C.M.I's. (Table 9,

Part I) which exceeded 2·00, sometimes by a wide margin, in nine out of the ten years from 1920 to 1929; had values between 2·00 and 1·00 in six out of the ten years 1930 to 1939; but were less than 1·00 on five occasions, and only once exceeded 2·00, in the ten years 1940 to 1949.

Table LXXIII.—Influenza Mortality in each Quarter and Pneumonia Mortality in December and March Quarters, in terms of the corresponding Quarter of 1938. Mean air temperatures, 1921 to 1949.

Year	Standardised mortality comparison with corresponding quarter of 1938*						Mean air temperature (Greenwich) in excess or defect of average for 1921–49			
	Influenza				Pneumonia		Degrees Fahrenheit			
	March	June	Sept.	Dec.	March	Dec.	March	June	Sept.	Dec.
1921 ..	2·069	1·847	1·586	4·430	1·428	2·034	+ 3·4	+ 0·6	+ 2·3	+ 1·9
1922 ..	10·924	1·636	1·623	1·846	1·803	1·741	+ 0·1	− 0·1	− 3·8	− 1·1
1923 ..	1·399	3·332	2·139	2·229	1·127	1·715	+ 3·7	− 2·9	− 0·1	− 2·3
1924 ..	7·666	3·457	1·581	2·219	1·838	1·576	− 1·3	+ 0·3	− 1·1	+ 1·8
1925 ..	4·535	2·227	1·687	2·652	1·274	2·265	+ 1·1	+ 0·7	− 1·0	− 1·3
1926 ..	1·698	3·077	1·606	2·364	1·258	1·623	+ 2·7	− 0·4	+ 1·1	− 1·4
1927 ..	10·304	1·442	1·762	2·595	1·881	1·581	+ 1·7	− 0·5	− 1·3	− 1·7
1928 ..	1·820	1·712	1·691	2·292	1·224	1·512	+ 2·3	− 1·2	+ 0·3	+ 0·6
1929 ..	13·487	2·601	1·492	1·784	2·493	1·455	− 4·1	− 1·3	+ 2·1	+ 1·1
1930 ..	1·212	0·886	1·207	1·552	1·099	1·351	+ 0·9	+ 0·7	− 0·1	+ 0·6
1931 ..	5·094	1·671	1·338	2·927	1·621	1·520	− 1·4	+ 0·3	− 2·7	+ 0·7
1932 ..	4·890	1·234	1·028	2·463	1·325	1·375	− 0·2	− 1·2	+ 1·2	+ 0·1
1933 ..	10·478	0·800	0·968	1·854	1·386	1·491	+ 0·1	+ 1·6	+ 3·6	− 2·3
1934 ..	1·409	1·090	0·909	1·260	1·245	1·126	− 1·0	+ 1·0	+ 1·7	+ 2·5
1935 ..	1·448	2·069	1·006	1·495	0·947	1·323	+ 1·7	− 0·4	+ 1·7	− 0·4
1936 ..	1·450	0·863	0·955	1·775	1·209	1·238	+ 0·2	− 0·4	0·0	− 0·3
1937 ..	7·775	0·863	0·839	1·394	1·175	1·438	+ 0·5	+ 1·1	+ 1·3	− 1·2
1938 ..	1·000	1·000	1·000	1·000	1·000	1·000	+ 3·6	− 1·3	− 0·3	+ 1·3
1939 ..	2·997	1·068	0·655	0·927	0·967	0·828	+ 0·8	− 0·7	− 6·2	− 0·9
1940 ..	4·919	0·658	0·614	0·887	1·360	1·093	− 3·8	+ 1·4	− 1·6	− 0·7
1941 ..	2·558	0·716	0·533	0·820	1·070	0·952	− 2·8	− 3·0	0·0	+ 0·5
1942 ..	0·983	0·435	0·529	0·738	0·790	0·830	− 5·4	+ 0·3	− 0·1	+ 1·0
1943 ..	1·150	0·484	0·463	10·600	0·740	1·527	+ 1·7	+ 2·3	0·0	− 0·2
1944 ..	1·248	0·320	0·422	0·746	0·670	0·843	− 0·4	+ 0·1	− 1·0	− 1·7
1945 ..	0·691	0·200	0·320	0·869	0·721	0·850	+ 1·0	+ 2·1	+ 0·3	+ 1·9
1946 ..	1·965	0·295	0·274	0·464	0·691	0·797	− 0·2	− 0·6	− 0·8	− 0·4
1947 ..	1·139	0·193	0·182	0·401	0·854	0·755	− 6·2	+ 2·2	+ 3·3	+ 1·0
1948 ..	0·239	0·103	0·216	0·430	0·477	0·750	+ 2·9	+ 0·2	− 0·8	+ 1·3
1949 ..	1·207	0·718	0·192	0·466	0·688	0·730	+ 1·0	+ 1·2	+ 3·5	+ 2·1

* Derived from the Comparative Mortality Index for the year (Table 9) multiplied by the ratio of proportion of annual deaths occurring in the quarter to the corresponding proportion for 1938.

Table LXXIII compares quarterly C.M.I's. for influenza and pneumonia with temperature. Relationships between these three series were discussed in some detail in the Text for 1946–47 (Page 119).

Geographical differences in death rates from influenza in middle and late adult life are shown in Table LXXIV. In the non-epidemic year 1948 there was an excess of mortality at ages 65 and over in the rural compared with the urban areas, but there was no evidence of this at ages 45–64. In the following year the increased mortality at both ages was relatively greater in the towns so that the urban-rural gradient at ages 65 and over disappeared and there was a well defined excess of mortality in the urban districts at ages 45–64. At ages 45–64 death rates were highest for males in the Midland I region and for females in North IV. At higher ages the rates for each sex were highest in Wales II. In both years the male death rates at 45–64 were, as usual, considerably higher than female, and this male excess was evident in all regions and types of area. The male preponderance of mortality was much less at ages 65 and over for the country as a whole, and in both years there were several regions where the female rate exceeded the male.

Table LXXIV.—Influenza : Death Rates per million living by Sex at Ages 45–64 and 65 and over in Regions and different classes of Area. 1948 and 1949.

Area	45–64				65 and over			
	Males		Females		Males		Females	
	1948	1949	1948	1949	1948	1949	1948	1949
England and Wales	**40**	**159**	**21**	**96**	**158**	**802**	**128**	**783**
Regional Summary :								
South East	25	129	17	71	167	630	126	575
Greater London	30	153	22	75	156	666	130	598
Remainder of South East	18	98	11	67	179	595	121	550
North	48	183	27	124	129	899	116	942
North I	41	162	19	92	121	730	122	641
North II	42	104	24	73	129	774	111	578
North III	47	208	26	90	108	987	94	1,009
North IV	53	192	31	162	143	938	128	1,070
Midland	39	182	17	106	175	1,035	145	917
Midland I	47	211	16	113	183	1,127	177	990
Midland II	24	127	18	95	158	868	84	777
East	28	166	17	100	121	936	113	1,022
South West	51	116	20	62	176	524	123	714
Wales	78	168	28	90	210	784	174	783
Wales I	94	157	31	71	235	612	155	626
Wales II	37	195	21	135	154	1,150	212	1,075
Density Summary :								
County boroughs*	45	191	22	112	141	866	105	835
Other urban districts* ..	44	161	19	106	159	815	123	788
Rural districts*	34	111	21	74	180	806	170	879

* Outside Greater London.

35. Measles.—As the result of fluctuating epidemic prevalence from year to year deaths from measles tend usually to be high one year and low the next, as for example, 243 deaths in 1944, 728 in 1945 ; 203 in 1946, 644 in 1947. But in 1948 and 1949 deaths numbered 326 and 307 respectively. The numbers occurring each quarter since 1944 are given in the table below :—

	March	June	September	December	Total
1944	29	44	30	147	243
1945	437	226	41	18	728
1946	51	45	46	62	203
1947	353	190	64	37	644
1948	94	116	37	79	326
1949	162	109	20	15	307

Deaths in 1948 exceeded those in 1949 mainly because of an unexpectedly high mortality in the March and still more the June quarter of 1948, high that is having regard to the usual biennial fluctuations of incidence.

Since 1944, notification rates per 100,000 population at all ages (final notifications after amendments of diagnosis) in England and Wales and in density aggregates were as follows :—

	England and Wales	England				Wales
		London	County Boroughs	Other Urban Districts	Rural Districts	
1944	**416**	298	531	412	343	223
1945	**1,167**	903	1,127	1,191	1,304	1,123
1946	**394**	735	418	388	276	189
1947	**941**	539	1,040	951	893	1,024
1948	**934**	917	1,049	908	916	595
1949	**895**	854	930	909	938	561
Average of 1944–49	**791**	**708**	**849**	**793**	**778**	**619**

On average the incidence of notified cases was highest in the county boroughs and other urban districts, lowest in Wales, London and the English rural districts. It is believed that a large proportion of clinically recognisable cases of measles, perhaps one-third, escape notification, and it may be that the lower rates recorded in the rural districts and in Wales arise partly from this cause ; but there is no reason why notifications should be less complete in London than elsewhere.

Table LXXV.—Measles : Corrected Notification and Fatality Rates by Sex and Age (Civilians), 1946 to 1949.

Ages (l.b.d.)	1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.
	Notifications* per 1,000 living							
0–	9·4	10·3	18·9	20·1	20·5	21·7	19·9	21·1
1–	27·1	26·4	62·2	62·9	62·9	63·1	61·8	61·2
3–	36·6	36·5	88·0	88·2	86·1	87·2	81·1	83·0
5–	21·8	22·4	53·0	53·2	52·3	53·2	48·0	48·5
10–	2·2	2·4	5·3	5·9	3·9	4·1	3·5	3·9
15–	0·1	0·1	0·3	0·4	0·2	0·2	0·2	0·2
All Ages	**4·3**	**3·6**	**10·1**	**8·8**	**9·9**	**8·8**	**9·5**	**8·4**
	Deaths per 1,000 notifications*							
0–	13·0	12·5	16·7	13·0	6·4	6·5	6·0	5·5
1–	2·0	1·8	3·2	3·0	1·2	1·3	1·2	1·2
3–	0·6	0·3	0·6	0·6	0·4	0·3	0·2	0·4
5–	0·3	0·2	0·3	0·3	0·2	0·3	0·3	0·3
10–	—	0·6	0·1	0·4	0·5	0·9	0·6	0·2
15–	3·2	1·8	0·5	2·1	2·3	2·2	2·6	3·5
All ages	**1·3**	**1·2**	**1·7**	**1·6**	**0·8**	**0·8**	**0·8**	**0·8**

* Fully corrected for diagnosis revision.

Since 1944 details by sex and age of corrected notifications have been obtained and each year the notification rate of males at " all ages " has exceeded the female rate. In infancy and at ages 5 and over, however (Table LXXV), more cases have always been notified among girls than boys.

Table LXXVI.—Measles : Notification Rates at ages 0–4 and 5–14, Death Rates and Fatality Rates in Regions, 1948 and 1949.

	Notifications* per 1,000 living at				Deaths at ages 0–4				Regional rates at ages 0–4 per cent. of England and Wales 1949		
	Ages 0–4		Ages 5–14		Per million living		Per 1,000 notifications*		Notifications per 1,000 living	Deaths per million living	Deaths per 1,000 notifications
	1948	1949	1948	1949	1948	1949	1948	1949			
England and Wales	**63**	**61**	**29**	**27**	**73**	**65**	**1·2**	**1·1**	**100**	**100**	**100**
Regional Summary :											
South East	55	63	31	33	50	49	0·9	0·8	103	75	73
Greater London	63	62	32	28	66	36	1·0	0·6	102	55	55
Remainder of South East ..	45	65	30	38	30	66	0·7	1·0	107	102	91
North	80	64	29	21	110	84	1·4	1·3	105	129	118
North I	94	64	29	22	96	25	1·0	0·4	105	38	36
North II	70	53	30	22	76	91	1·1	1·7	87	140	155
North III	72	79	27	25	96	104	1·3	1·3	130	160	118
North IV	82	58	29	17	131	93	1·6	1·6	95	143	145
Midland	60	61	27	26	60	74	1·0	1·2	100	114	109
Midland I	57	61	26	25	56	82	1·0	1·3	100	126	118
Midland II	65	61	31	27	68	59	1·0	1·0	100	91	91
East	62	35	42	25	65	46	1·0	1·3	57	71	118
South West	36	67	25	42	22	48	0·6	0·7	110	74	64
Wales	43	42	16	14	100	60	2·3	1·4	69	92	127
Wales I	39	50	12	16	91	76	2·3	1·5	82	117	136
Wales II	54	19	27	11	123	18	2·3	0·9	31	28	82
Density Summary :											
County boroughs†	74	69	27	22	86	87	1·2	1·2	113	134	109
Other urban districts† ..	60	61	27	26	70	65	1·2	1·1	100	100	100
Rural districts†	47	46	33	32	62	60	1·3	1·3	75	92	118

* Fully corrected for diagnosis revision.

† Excluding Greater London.

Notification, death, and fatality rates at childhood ages in the geographical regions in 1948 and 1949 are shown in Table LXXVI. The North I region gave the highest notification rate at ages 0–4 in 1948 whereas North III gave the highest rate in 1949. The fatality rate at ages 0–4 (deaths per 1,000 notifications) for the country as a whole was 1·2 in 1948 and 1·1 in 1949 compared with 2·9, 2·7, 2·0 and 2·7 in each year 1944 to 1947. Rates in the vicinity of 1 death per 1,000 notified cases occurred fairly uniformly throughout the country in both years.

Although at ages 0–4 notification and death rates were higher in the towns than in the country districts the gradient was reversed in respect of notifications at ages 5–14 presumably owing to the later age incidence of measles among children living in rural areas.

36. Acute Poliomyelitis and Polioencephalitis.—Following the unprecedentedly high prevalence of poliomyelitis, including polioencephalitis, in 1947 with 7,766 corrected notifications and 707 deaths, 1,848 cases were notified in 1948 with 241 deaths, and 5,967 cases in 1949 with 657 deaths. Table LXXVII shows the relative proportions described each year as poliomyelitis or as polioencephalitis.

Table LXXVII.—Acute Poliomyelitis and Polioencephalitis: Notifications and Deaths.* 1931–49.

Year	Acute poliomyelitis		Acute polioencephalitis		Acute poliomyelitis and polioencephalitis	
	Number of notifications	Number of deaths	Number of notifications	Number of deaths	Death rate per million	
					Ages 0–15	All ages†
1931 ..	341	64	55	35	7	2
1932 ..	656	104	94	75	13	4
1933 ..	714	136	83	67	13	5
1934 ..	590	83	81	53	9	3
1935 ..	633	98	67	48	11	4
1936 ..	530	68	53	35	7	3
1937 ..	768	97	95	56	8	4
1938 ..	1,489	174	96	82	18	6
1939 ..	744	95	88	48	10	3
1940 ..	951	107	128	54	9	4
1941 ..	876	113	83	47	9	4
1942 ..	581	82	93	50	7	3
1943 ..	410	63	46	27	4	2
1944 ..	(*a*) 523	87	(*a*) 67	22	4	3
	(*b*) 458		(*b*) 68			
1945 ..	(*a*) 827	97	(*a*) 77	42	4	3
	(*b*) 779		(*b*) 74			
1946 ..	(*a*) 694	91	(*a*) 61	37	5	3
	(*b*) 611		(*b*) 62			
1947 ..	(*a*) 8,752	500	(*a*) 583	207	33	16
	(*b*) 7,207		(*b*) 559			
1948 ..	(*a*) 2,092	167	(*a*) 154	74	8	6
	(*b*) 1,693		(*b*) 155			
1949 ..	(*a*) 6,484	436	(*a*) 491	221	29	15
	(*b*) 5,485		(*b*) 482			

* Deaths are corrected to 1940 classification.

† Civilian rates in 1940–49.

(*a*) Original notifications. (*b*) Corrected by diagnosis revision.

Although the total of cases notified in 1948 was larger than in any previous year, except 1947, the death rate at ages under 15, 8 per million, has been exceeded on numerous occasions. It may be that following the severe epidemic of 1947, practitioners became more able and more disposed to diagnose and notify cases of poliomyelitis than they had been previously.

Numbers of deaths per 100 corrected notifications in 1944 to 1949 were as follows :—

	1944	*1945*	*1946*	*1947*	*1948*	*1949*
Poliomyelitis	19	12	15	7	10	8
Polioencephalitis	32	57	60	37	48	46

Though the fatality rate from poliomyelitis so described was lower in 1947–49 than in previous years, there was no definite reduction in the fatality of encephalitic cases, almost half of which in 1948 and 1949 terminated fatally.

Table LXXVIII.—Acute Poliomyelitis and Polioencephalitis : Notifications* and Deaths by Sex and Age, and case, death and fatality rates. 1948 and 1949.

Age Group	Acute poliomyelitis				Acute polioencephalitis				All forms		
	Notifications		Deaths		Notifications		Deaths		Cases per million living	Deaths per 100 cases	Deaths per million living
	M.	F.	M.	F.	M.	F.	M.	F.			
1948											
Civilians											
0–	49	31	—	2	4	1	3	—	108	6	6
1–	150	129	2	6	7	3	1	2	189	4	7
3–	121	87	—	2	9	3	3	2	165	3	5
5–	177	132	13	6	25	12	8	3	120	9	10
10–	132	96	8	5	20	7	5	2	92	8	7
15–	148	114	31	20	13	14	11	6	53	24	12
25 and over ..	144	152	41	29	15	22	14	14	12	29	4
Unknown	6	6	—	—	—	—	—	—	—	—	—
All ages	**927**	**747**	**95**	**70**	**93**	**62**	**45**	**29**	**43**	**13**	**6**
Non-civilians (all ages)	18	1	2	—	—	—	—	—	—	11	—
1949											
Civilians											
0–	123	114	5	8	8	11	4	8	350	10	34
1–	556	430	15	17	44	21	15	9	640	5	34
3–	448	338	17	9	33	33	14	8	642	6	36
5–	668	513	38	24	66	34	20	10	430	7	31
10–	390	279	24	18	41	23	9	6	260	8	20
15–	415	357	45	50	35	24	18	19	153	16	24
25 and over ..	395	392	91	71	52	51	44	35	32	27	9
Unknown	14	7	—	—	1	2	—	—	—	—	—
All ages	**3,009**	**2,430**	**235**	**197**	**280**	**199**	**124**	**95**	**137**	**11**	**15**
Non-civilians (all ages)	40	6	4	—	3	—	2	—	—	12	—

* Corrected for diagnosis revision

Table LXXVIII gives the sex and age distribution of notified cases and of deaths in 1948 and 1949, and rates without distinction of sex. Notification rates were highest at ages 1–4, but fatality rates were highest at ages 15 and over. Death rates were variable in 1948, but in 1949 were highest at ages under 5, and declined with advancing age.

Rates in 1949 are compared below with corresponding rates in 1947 taken as 100 :—

	0–	*1–*	*3–*	*5–*	*10–*	*15–*	*25 & over*	*All ages*
Notification rate	101	80	83	76	64	65	70	75
Death rate	76	89	109	103	67	86	100	94

Although the total notification and death rates in 1949 were less than in 1947, the notification rate was just higher in infancy in 1949, and the death rates were higher at ages 3–9.

(55588)

Table LXXIX.—Acute Poliomyelitis and Polioencephalitis : Notification, Death and Fatality Rates by Sex and Age in England and Wales and Different Classes of Area, 1948 and 1949 (excluding non-civilians).

Area		Notifications* per 100,000 living			Deaths per million living			Deaths per 100 notifications		
		0–	5–	15 and over	0–	5–	15 and over	0–	5–	15 and over
					1948					
England and Wales	**M.**	**18**	**12**	**2**	**5**	**12**	**6**	**2·6**	**9·6**	**30·1**
	F.	**14**	**9**	**2**	**8**	**6**	**4**	**5·4**	**6·5**	**22·7**
Greater London ..	M.	19	17	2	3	14	8	1·5	8·1	31·5
	F.	14	13	3	6	2	6	4·3	1·5	22·6
County boroughs†	M.	19	10	2	7	8	4	3·6	7·5	26·6
	F.	17	8	1	5	6	2	3·2	7·1	20·7
Other urban districts†	M.	17	11	2	3	14	6	1·9	12·1	34·5
	F.	14	7	2	11	4	4	7·8	6·7	22·7
Rural districts† ..	M.	18	12	3	6	12	8	3·2	10·0	27·9
	F.	12	10	2	9	11	5	7·9	11·3	24·6
					1949					
England and Wales	**M.**	**64**	**40**	**6**	**37**	**31**	**13**	**5·8**	**7·8**	**22·0**
	F.	**53**	**30**	**5**	**33**	**20**	**10**	**6·2**	**6·8**	**21·2**
Greater London	M.	100	54	6	42	39	11	4·2	7·3	17·5
	F.	81	44	5	45	24	11	5·5	5·6	22·2
County boroughs†	M.	59	32	4	49	18	10	8·3	5·6	22·3
	F.	48	23	4	28	18	9	5·9	7·8	22·0
Other urban districts†	M.	58	38	6	32	35	14	5·5	9·3	24·1
	F.	46	26	4	35	24	9	7·7	9·1	20·1
Rural districts† ..	M.	48	42	7	20	36	16	4·2	8·6	22·7
	F.	44	34	6	24	15	12	5·5	4·2	20·6

* Corrected for diagnosis revision.
† Excluding Greater London.

Notification, death and fatality rates of males and of females at three separate ages in 1948 and 1949 are compared in Table LXXIX for the country as a whole and for the main density aggregates. In the corresponding table for 1947 (Text 1946–47, Table LXXX and diagram) a noteworthy feature was that the male rate nearly always exceeded the corresponding female rate. In general the male excess of cases and of deaths was maintained in 1948 and 1949, but exceptions were more numerous. A further peculiarity observed in 1947 was that notification and death rates of males at ages 5–14 in Greater London exceeded those at ages 0–4 in contrast with other areas. In 1949, however, the rates in the younger age group in Greater London were much higher than those of older children as is shown in the table below :—

Greater London

Year	Notification rates per 100,000 males			Death rates per million males		
	0–	5–	15 and over	0–	5–	15 and over
1947	74	80	9	26	55	13
1949	100	54	6	42	39	11

Table LXXX.—Acute Poliomyelitis and Polioencephalitis: Notifications* and deaths by age in successive quarters during 1948 and 1949.

Age Group	March Quarter		June Quarter		September Quarter		December Quarter	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1948								
Civilians								
0–	12	2	5	—	41	2	27	1
1–	29	4	26	1	114	2	120	4
3–	22	—	29	—	99	2	70	5
5–	55	5	31	3	127	14	132	8
10–	55	8	28	5	87	—	86	7
15–	67	21	20	5	104	19	100	23
25 and over	77	28	40	14	101	21	115	35
Unknown ..	7	—	3	—	3	—	8	—
All ages	**324**	**68**	**182**	**28**	**676**	**60**	**658**	**83**
Non-civilians (all ages)	2	1	4	—	3	—	10	1
1949								
Civilians								
0–	7	1	12	2	123	12	115	10
1–	22	2	32	1	470	20	528	33
3–	25	2	31	4	399	22	399	20
5–	28	1	56	4	534	36	657	51
10–	27	1	30	4	321	23	354	29
15–	31	6	28	2	400	55	369	69
25 and over	31	13	34	14	383	96	443	118
Unknown ..	—	—	3	—	15	—	13	—
All ages	**171**	**26**	**226**	**31**	**2,645**	**264**	**2,878**	**330**
Non-civilians (all ages)	2	—	3	1	22	1	22	4

* Corrected for diagnosis revision.

Table LXXX gives numbers of notifications and deaths by age in successive quarters in 1948 and 1949. In each year the numbers of cases notified in the September and the December quarters were approximately equal, in contrast with 1947 when there were over 5,000 cases notified in the September quarter and under 2,000 in the December quarter. This is further illustrated by the weekly notification figures (Table 27, Part I) which reached a maximum in the week ended September 6th in 1947 but not until the week ended October 15th in 1949.

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The age distribution of notified cases and of deaths in 1949, and notification and death rates under 15 and at "all ages" are given in Table LXXXI for geographical regions, density aggregates, county boroughs, and for urban and rural aggregates within administrative counties. A similar analysis for 1947 was given in the Text for 1946–1947. Notification and death rates at "all ages" were highest in the South West and the North III regions, followed by Greater London and the South East. Rates were slightly higher in rural than in urban districts and less in the county boroughs.

The county boroughs with highest rates (all ages) are shown below, with rates in parentheses (rates based on less than 20 notifications or deaths indicated by italics) :—

Notification rates (per 100,000)		*Death rates* (per million)	
Dewsbury	(46)	Huddersfield	(156)
Huddersfield	(43)	Dewsbury	(*76*)
Barnsley	(35)	Barnsley	(*66*)
Reading	(35)	Barrow-in-Furness	(*52*)
Bristol	(30)	Reading	(*52*)

Administrative counties whose aggregated urban districts had a high rate (all ages) were :—

Notification rates (per 100,000)		*Death rates* (per million)	
Rutland	(*54*)	Brecknockshire	(*63*)
Cornwall	(45)	Merionethshire	(*57*)
Leicestershire	(26)	Cardiganshire	(*54*)
Brecknockshire	(*25*)	Wiltshire	(*51*)
Dorset	(24)	Cornwall	(*44*)
Lincs., Lindsey	(24)	Herefordshire	(*39*)
Berkshire	(22)	Leicestershire	(*37*)
Essex	(20)	Lincs., Lindsey	(*27*)
		Hertfordshire	(*26*)
		Surrey	(25)

Similarly, the administrative counties where aggregated rural districts had a high rate (all ages), are shown below :—

Notification rates (per 100,000)		*Death rates* (per million)	
Huntingdonshire	(*37*)	Huntingdonshire	(*58*)
Westmorland	(*35*)	Westmorland	(*58*)
Essex	(33)	Cheshire	(*51*)
Peterborough, Soke of	(*31*)	Hertfordshire	(*48*)
Bedfordshire	(27)	Suffolk, West	(*43*)
Hertfordshire	(25)	Kent	(*42*)
Kent	(25)	Lincs., Lindsey	(*40*)

Table LXXXI.—Poliomyelitis and Polioencephalitis : Numbers of Notifications and Deaths by Age, with Notification and Death Rates : England and Wales, Geographical Regions, County Boroughs and Urban and Rural aggregates in Administrative Counties. 1949 (excluding non-civilians).

(1) Notifications corrected for diagnosis revision.
(2) Rates based on less than 20 notifications or deaths are shown in italics.
(3) Numbers of notifications in England and Wales and in regions include some minor amendments which have not been carried out for individual areas.

Area	Number of corrected notifications						Number of deaths					Under 15		All ages	
	0–	5–	15–	25 and over	Age not known	All Ages	0–	5–	15–	25 and over	All Ages	Notifications per 100,000	Deaths per million	Notifications per 100,000	Deaths per million
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
England and Wales	**2,159**	**2,014**	**831**	**890**	**24**	**5,918**	**129**	**149**	**132**	**241**	**651**	**44**	**29**	**14**	**15**
Regional Summary :															
South East	959	899	340	423	5	**2,626**	48	56	57	107	**268**	59	33	18	18
Greater London	626	490	167	198	1	**1,482**	30	32	28	44	**134**	66	37	18	16
Remainder of South East	333	409	173	225	4	**1,144**	18	24	29	63	**134**	52	29	18	21
North	586	492	214	201	5	**1,498**	50	46	41	67	**204**	36	32	11	15
North I	51	28	32	14	3	**128**	3	3	3	2	**11**	15	*11*	6	*5*
North II	43	44	20	14	2	**123**	4	3	2	5	**14**	27	*22*	9	*10*
North III	254	247	91	97	—	**689**	24	26	17	32	**99**	64	63	19	28
North IV	238	173	71	76	—	**558**	19	14	19	28	**80**	30	24	9	13
Midland	320	295	134	104	3	**856**	15	19	16	26	**76**	34	19	11	10
Midland I	180	167	69	58	2	**476**	10	9	9	11	**39**	28	*16*	9	7
Midland II	140	128	65	46	1	**380**	5	10	7	15	**37**	44	*25*	14	14
East	61	111	50	56	—	**278**	7	5	5	12	**29**	39	*27*	14	15
South West	131	166	79	84	3	**463**	2	21	9	21	**53**	61	47	20	23
Wales	102	51	14	22	8	**197**	7	2	4	8	**21**	27	*16*	8	8
Wales I	96	37	11	20	4	**168**	7	1	4	5	**17**	32	*19*	9	*9*
Wales II	6	14	3	2	4	**29**	—	1	—	3	**4**	13	*6*	4	*6*
Density Summary :															
County boroughs*	618	490	206	213	4	**1,531**	45	32	41	52	**170**	38	26	12	13
Other urban districts*	604	604	257	279	9	**1,753**	39	56	36	84	**215**	40	31	13	16
Rural districts*	311	430	201	200	10	**1,152**	15	29	26	62	**132**	41	*24*	14	17

* Excluding Greater London.

Table LXXXI.—*contd.*

Area	Number of corrected notifications						Number of deaths					Under 15		All ages	
	0–	5–	15–	25 and over	Age not known	All Ages	0–	5–	15–	25 and over	All Ages	Notifications per 100,000	Deaths per million	Notifications per 100,000	Deaths per million
County Boroughs :															
Barnsley	14	5	3	4	—	26	2	1	1	1	5	*104*	*164*	35	*66*
Barrow-in-Furness	1	2	—	1	—	4	—	—	—	—	—	*19*	—	*6*	—
Bath	3	6	5	7	—	21	—	1	2	1	4	*56*	*62*	27	*52*
Birkenhead	3	—	—	—	—	3	1	—	—	—	1	*9*	*30*	*2*	*7*
Birmingham	31	37	9	9	—	86	3	1	4	3	11	26	*16*	8	*10*
Blackburn	4	2	1	2	—	9	—	—	1	1	2	*28*	—	*8*	*18*
Blackpool	4	2	2	1	—	9	—	—	1	—	1	*25*	—	*6*	*7*
Bolton	4	3	2	—	—	9	—	—	—	—	—	*20*	—	*5*	—
Bootle	8	2	2	—	—	12	1	—	—	—	1	*51*	*51*	*17*	*14*
Bournemouth	9	5	7	7	—	28	1	—	1	2	4	*56*	*40*	20	*29*
Bradford	10	7	8	7	—	32	2	—	1	4	7	*29*	*34*	11	*24*
Brighton	8	16	4	10	—	38	1	—	—	2	3	*77*	*32*	25	*19*
Bristol	59	43	20	12	—	134	2	—	2	1	5	108	*21*	30	*11*
Burnley	2	2	—	—	—	4	—	—	—	—	—	*24*	—	*5*	—
Burton upon Trent	2	—	1	1	—	4	—	—	—	—	—	*19*	—	*8*	—
Bury	—	—	—	1	—	1	—	—	—	—	—	—	—	*2*	—
Canterbury	—	1	1	—	—	2	—	—	—	—	—	*16*	—	*8*	—
Carlisle	2	2	—	2	—	6	—	—	—	2	2	*28*	—	*9*	*30*
Chester	2	1	1	1	—	5	—	1	—	1	2	*30*	*100*	*11*	*42*
Coventry	8	6	1	4	1	20	—	—	—	—	—	*24*	—	8	—
Croydon	5	2	—	3	—	10	1	—	—	1	2	*14*	*19*	*4*	*8*
Darlington	1	—	1	—	—	2	—	—	—	—	—	*5*	—	*2*	—
Derby	2	1	1	—	—	4	—	—	—	—	—	*10*	—	*3*	—
Dewsbury	9	9	2	4	—	24	2	—	1	1	4	*153*	*170*	46	*76*
Doncaster	2	3	—	—	—	5	1	—	1	—	2	*27*	*53*	*6*	*25*
Dudley	4	—	—	1	—	5	—	—	—	—	—	*27*	—	*8*	—
Eastbourne	2	1	—	—	—	3	—	—	—	—	—	*27*	—	*5*	—
East Ham	9	3	—	1	—	13	—	1	—	—	1	*47*	*39*	*11*	*8*
Exeter	3	1	—	2	—	6	—	—	1	—	1	*25*	—	*8*	*13*
Gateshead	3	—	2	—	—	5	—	—	2	—	2	*11*	—	*4*	*17*
Gloucester	—	4	—	—	—	4	—	—	—	—	—	*28*	—	*6*	—
Great Yarmouth	2	2	—	2	—	6	—	—	—	—	—	*35*	—	12	—
Grimsby	5	9	2	2	—	18	1	1	—	2	4	*61*	*87*	*20*	*44*
Halifax	3	3	—	1	—	7	—	—	—	1	1	*30*	—	*7*	*10*
Hastings	—	—	2	—	—	2	—	—	1	—	1	—	—	*3*	*15*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
County Boroughs—*contd.*															
Huddersfield	14	25	3	13	—	55	3	5	3	9	20	157	*322*	43	156
Ipswich	2	1	—	2	—	5	—	—	—	—	—	*13*	—	*5*	—
Kingston upon Hull	13	8	3	1	—	25	1	—	—	—	1	27	*13*	8	*3*
Leeds	49	29	12	19	—	109	4	2	—	5	11	72	*56*	22	*22*
Leicester	21	18	11	6	—	56	—	1	1	1	3	64	*16*	20	*11*
Lincoln	—	4	3	2	—	9	—	—	—	—	—	*28*	—	*13*	—
Liverpool	34	18	5	9	—	66	2	1	1	2	6	25	*15*	8	*7*
Manchester	20	8	3	4	—	35	3	1	2	2	8	18	*26*	5	*11*
Middlesbrough	1	1	—	—	—	2	1	—	—	—	1	*5*	*27*	*1*	*7*
Newcastle upon Tyne	15	9	10	6	3	43	—	—	—	—	—	36	—	15	—
Northampton	5	5	—	1	—	11	—	1	—	—	1	*46*	*46*	*11*	*10*
Norwich	5	6	4	5	—	20	—	—	—	—	—	*43*	—	17	—
Nottingham	19	14	11	10	—	54	—	1	1	1	3	48	*14*	18	*10*
Oldham	1	—	—	—	—	1	—	—	—	—	—	*4*	—	*1*	—
Oxford	3	9	2	5	—	19	—	—	1	1	2	*58*	—	*18*	*19*
Plymouth	7	11	2	—	—	20	—	2	—	—	2	*40*	*45*	10	*10*
Portsmouth	17	10	—	2	—	29	—	1	—	—	1	53	*19*	13	*5*
Preston	1	2	—	—	—	3	—	—	—	—	—	*12*	—	*3*	—
Reading	12	17	5	6	—	40	1	1	2	2	6	116	*80*	35	*52*
Rochdale	2	1	—	1	—	4	—	—	—	1	1	*18*	—	*4*	*11*
Rotherham	5	3	2	2	—	12	—	—	2	—	2	*40*	—	*15*	*24*
St. Helens	1	—	—	—	—	1	—	—	—	—	—	*4*	—	*1*	—
Salford	22	10	1	4	—	37	—	—	—	—	—	79	—	21	—
Sheffield	44	54	18	15	—	131	3	8	1	3	15	87	*97*	26	*29*
Smethwick	—	1	—	1	—	2	—	—	—	—	—	*6*	—	*3*	—
Southampton	10	11	10	6	—	37	—	1	4	—	5	50	*24*	21	*28*
Southend-on-Sea	5	7	5	—	—	17	—	1	1	—	2	*39*	*33*	*11*	*13*
Southport	—	1	—	1	—	2	—	—	—	—	—	*7*	—	*2*	—
South Shields	8	1	—	—	—	9	1	—	—	—	1	*35*	*39*	*8*	*9*
Stockport	2	1	1	2	—	6	1	—	—	—	1	*10*	*34*	*4*	*7*
Stoke on Trent	10	3	1	—	—	14	2	1	—	—	3	*20*	*46*	*5*	*11*
Sunderland	1	—	—	—	—	1	—	—	—	—	—	*2*	—	*1*	—
Tynemouth	1	—	—	—	—	1	—	—	—	—	—	*6*	—	*2*	—
Wakefield	5	1	—	1	—	7	—	—	—	—	—	*45*	—	*12*	—
Wallasey	4	1	—	—	—	5	1	—	—	—	1	*22*	*45*	*5*	*10*
Walsall	1	—	—	1	—	2	—	—	—	—	—	*4*	—	*2*	—
Warrington	2	1	1	—	—	4	2	—	—	—	2	*16*	*109*	*5*	*25*
West Bromwich	2	—	—	—	—	2	—	—	—	—	—	*9*	—	*2*	—
West Ham	27	7	2	3	—	39	1	—	—	—	1	82	*24*	22	*6*
West Hartlepool	1	1	1	—	—	3	—	—	—	1	1	*11*	—	*4*	*14*
Wigan	—	1	—	—	—	1	—	—	—	—	—	*5*	—	*1*	—
Wolverhampton	3	—	2	—	—	5	—	—	—	—	—	*8*	—	*3*	—
Worcester	—	1	1	—	—	2	—	—	—	—	—	*7*	—	*3*	—
York	6	6	10	6	—	28	2	—	1	1	4	*50*	*83*	27	*38*

Table LXXXI.—*contd.*

Area		Number of corrected notifications						Number of deaths					Under 15		All ages	
		0–	5–	15–	25 and over	Age not known	All Ages	0–	5–	15–	25 and over	All Ages	Notifications per 100,000	Deaths per million	Notifications per 100,000	Deaths per million
County Boroughs—*contd.*																
Cardiff		13	5	2	1	—	21	1	—	2	1	4	*33*	*19*	9	*16*
Merthyr Tydfil		1	1	—	—	—	2	—	—	—	—	—	*15*	—	*3*	—
Newport, Mon.		—	—	—	1	—	1	—	—	—	—	—	—	—	*1*	—
Swansea		20	8	2	—	—	30	—	—	—	—	—	80	—	19	—
Admin. Counties :																
Bedfordshire	U.D.	2	8	4	4	—	18	—	1	1	—	2	*21*	*21*	*9*	*9*
	R.D.	8	9	5	3	—	25	—	1	1	—	2	*85*	*50*	27	*22*
Berkshire	U.D.	4	7	3	7	—	21	—	—	—	2	2	*52*	—	22	*21*
	R.D.	11	17	6	8	2	44	1	1	—	2	4	66	*47*	24	*22*
Buckinghamshire	U.D.	5	7	5	4	—	21	—	—	1	—	1	*28*	—	11	*5*
	R.D.	9	10	5	7	1	32	—	—	2	3	5	*46*	—	17	*27*
Cambridgeshire	U.D.	1	5	4	2	—	12	—	—	—	1	1	*38*	—	*13*	*11*
	R.D.	1	2	—	—	—	3	2	—	—	—	2	*18*	*12*	*4*	*25*
Cheshire	U.D.	26	21	9	11	—	67	1	4	2	4	11	35	*37*	11	*18*
	R.D.	8	8	12	8	—	36	1	1	2	5	9	*43*	*54*	20	*51*
Cornwall	U.D.	30	21	17	14	—	82	1	1	2	4	8	135	*53*	45	*44*
	R.D.	9	12	4	4	—	29	—	2	—	1	3	67	*64*	19	*20*
Cumberland	U.D.	2	2	—	—	—	4	—	—	—	—	—	*20*	—	*5*	—
	R.D.	9	7	4	5	—	25	1	—	—	2	3	*54*	*34*	20	*24*
Derbyshire	U.D.	4	8	1	2	—	15	—	—	—	1	1	*15*	—	*4*	*3*
	R.D.	9	11	6	6	1	33	—	—	—	2	2	27	—	10	*6*
Devon	U.D.	15	16	6	6	—	43	1	1	—	—	2	61	*39*	17	*8*
	R.D.	15	21	2	6	1	45	—	3	—	4	7	72	*60*	19	*29*
Dorset	U.D.	7	15	13	5	1	41	—	1	—	3	4	58	*26*	24	*23*
	R.D.	3	12	2	7	—	24	—	1	—	2	3	*66*	*44*	24	*30*
Durham	U.D.	5	7	6	4	—	22	1	1	1	1	4	*8*	*13*	4	*6*
	R.D.	4	1	1	—	—	6	—	1	—	—	1	*7*	*15*	*2*	*4*
	(*1*)	(*2*)	(*3*)	(*4*)	(*5*)	(*6*)	(*7*)	(*8*)	(*9*)	(*10*)	(*11*)	(*12*)	(*13*)	(*14*)	(*15*)	(*16*)

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Admin. Counties—*contd.*																
Ely, Isle of	U.D.	2	2	1	1	—	**6**	—	—	—	—	—	*33*	—	*11*	—
	R.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Essex	U.D.	92	102	40	37	1	**272**	5	10	7	5	**27**	65	*50*	20	20
	R.D.	23	19	12	18	—	**72**	1	—	1	3	**5**	87	*21*	33	*23*
Gloucestershire	U.D.	11	7	4	4	—	**26**	1	—	—	2	**3**	*56*	*31*	18	*21*
	R.D.	6	9	9	2	—	**26**	—	—	1	1	**2**	*23*	—	9	*7*
Herefordshire	U.D.	3	2	—	4	—	**9**	—	—	—	2	**2**	*43*	—	*18*	*39*
	R.D.	—	5	2	3	—	**10**	—	—	—	—	—	*29*	—	*14*	—
Hertfordshire	U.D.	25	22	13	18	—	**78**	1	1	3	6	**11**	49	*21*	18	*26*
	R.D.	12	18	5	7	—	**42**	—	2	2	4	**8**	82	*55*	25	*48*
Huntingdonshire	U.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	R.D.	1	7	5	—	—	**13**	—	1	1	—	**2**	*102*	*128*	*37*	*58*
Kent	U.D.	55	114	24	33	1	**227**	2	3	4	6	**15**	64	*19*	19	*13*
	R.D.	13	35	9	20	—	**77**	1	2	2	8	**13**	68	*42*	25	*42*
Lancashire	U.D.	77	74	27	28	2	**208**	6	5	8	9	**28**	41	*30*	12	16
	R.D.	13	7	2	5	—	**27**	—	1	1	4	**6**	32	*16*	9	*21*
Leicestershire	U.D.	17	14	7	4	—	**42**	1	2	1	2	**6**	84	*82*	26	*37*
	R.D.	12	10	6	3	—	**31**	—	1	1	2	**4**	53	*24*	17	*22*
Lincs., Holland	U.D.	—	1	—	1	—	**2**	—	—	—	—	—	*11*	—	*5*	—
	R.D.	1	4	2	1	—	**8**	—	—	1	—	**1**	*35*	—	*13*	*16*
Lincs., Kesteven	U.D.	1	3	2	4	—	**10**	—	—	—	—	—	*37*	—	*21*	—
	R.D.	3	—	3	1	—	**7**	—	—	—	1	**1**	*18*	—	*9*	*14*
Lincs., Lindsey	U.D.	10	17	3	5	—	**35**	1	2	—	1	**4**	78	*87*	24	*27*
	R.D.	7	11	7	4	—	**29**	1	—	2	3	**6**	*52*	*29*	19	*40*
London		356	173	63	76	—	**668**	12	11	11	16	**50**	82	36	20	15
Middlesex	U.D.	122	113	52	61	—	**348**	10	9	8	17	**44**	50	*40*	15	19
Norfolk	U.D.	1	4	1	4	—	**10**	—	—	—	1	**1**	*32*	—	*14*	*14*
	R.D.	7	19	5	11	—	**42**	1	—	1	—	**2**	40	*15*	15	*7*
Northamptonshire ..	U.D.	13	7	2	2	—	**24**	—	1	1	1	**3**	68	*34*	18	*23*
	R.D.	4	4	6	3	—	**17**	—	—	1	1	**2**	*30*	—	*14*	*17*
Northumberland	U.D.	11	8	8	2	—	**29**	1	1	—	—	**2**	*25*	*27*	9	*6*
	R.D.	1	1	3	2	—	**7**	—	—	—	—	—	*9*	—	*7*	—
Nottinghamshire	U.D.	27	19	4	4	—	**54**	4	3	—	2	**9**	54	*82*	15	*24*
	R.D.	7	12	3	4	—	**26**	—	—	1	2	**3**	*54*	—	17	*20*

Table LXXXI.—*contd.*

Area		Number of corrected notifications						Number of deaths					Under 15		All ages	
		0–	5–	15–	25 and over	Age not known	All Ages	0–	5–	15–	25 and over	All Ages	Notifications per 100,000	Deaths per million	Notifications per 100,000	Deaths per million
Admin. Counties—*contd.*																
Oxford	U.D.	3	2	1	1	—	7	—	—	—	—	—	*46*	—	*15*	—
	R.D.	3	7	4	2	—	16	—	—	—	—	—	*37*	—	*14*	—
Peterborough, Soke of ..	U.D.	—	4	6	—	—	10	—	—	—	—	—	*35*	—	*18*	—
	R.D.	—	1	1	1	—	3	—	—	—	—	—	*45*	—	*31*	—
Rutland	U.D.	1	—	—	1	—	2	—	—	—	—	—	*104*	—	*54*	—
	R.D.	—	1	1	—	—	2	—	—	—	—	—	*26*	—	*13*	—
Shropshire	U.D.	2	3	—	—	—	5	—	—	—	—	—	*15*	—	*4*	—
	R.D.	2	1	1	1	—	5	—	—	—	1	1	*9*	—	*4*	*8*
Somerset	U.D.	12	9	6	7	1	35	—	2	1	1	4	44	*42*	16	*18*
	R.D.	8	15	10	14	2	49	—	1	1	—	2	43	*19*	20	*8*
Southampton	U.D.	19	25	5	15	—	64	—	—	—	4	4	56	—	19	*12*
	R.D.	19	16	6	7	1	49	1	1	1	1	4	60	*34*	20	*16*
Staffordshire	U.D.	10	16	4	3	—	33	1	3	—	—	4	17	*26*	5	*6*
	R.D.	1	4	1	1	—	7	—	—	1	—	1	*11*	—	*3*	*5*
Suffolk, East	U.D.	9	1	3	3	—	16	—	—	—	—	—	*47*	—	*17*	—
	R.D.	3	7	1	2	—	13	—	1	—	1	2	*36*	*36*	*11*	*17*
Suffolk, West	U.D.	—	1	1	—	—	2	—	—	—	—	—	*11*	—	*5*	—
	R.D.	1	4	2	3	—	10	1	—	—	2	3	*32*	*64*	*14*	*43*
Surrey	U.D.	44	64	18	28	—	154	7	6	3	14	30	44	*52*	13	25
	R.D.	8	5	6	5	—	24	—	2	—	1	3	*41*	*64*	17	*21*
Sussex, East	U.D.	4	9	1	4	—	18	—	—	—	4	4	*37*	—	*10*	*22*
	R.D.	5	8	9	4	—	26	—	—	—	1	1	*39*	—	17	*6*
Sussex, West	U.D.	5	6	2	4	—	17	1	—	1	1	3	*33*	*30*	*10*	*18*
	R.D.	4	9	2	2	—	17	1	—	—	—	1	*40*	*31*	*12*	*7*
Warwickshire	U.D.	14	11	5	9	—	39	—	4	1	1	6	35	*56*	12	*19*
	R.D.	7	8	6	1	—	22	1	—	—	—	1	*40*	*27*	13	*6*
Westmorland	U.D.	1	2	—	2	—	5	—	—	—	—	—	*46*	—	*16*	—
	R.D.	2	4	4	2	—	12	—	1	—	1	2	*77*	*128*	*35*	*58*
Wight, I. of	U.D.	1	4	1	5	—	11	—	1	—	—	1	*32*	*65*	*15*	*13*
	R.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Admin. Counties—*contd.*																
Wiltshire	U.D.	9	9	7	4	1	30	—	4	1	4	9	*46*	*102*	17	*51*
	R.D.	9	15	7	5	1	37	—	2	1	1	4	59	*50*	21	*23*
Worcestershire	U.D.	3	4	2	1	1	11	—	—	—	—	—	*11*	—	*4*	—
	R.D.	1	2	—	—	—	3	—	—	—	—	—	*12*	—	*3*	—
Yorkshire, E. Riding ..	U.D.	1	3	3	1	—	8	—	—	1	—	1	*17*	—	*8*	*10*
	R.D.	5	6	1	—	—	12	1	1	—	—	2	*49*	*89*	*12*	*20*
Yorkshire, N. Riding ..	U.D.	3	2	1	—	2	8	—	—	—	—	—	*10*	—	*4*	—
	R.D.	4	7	4	1	—	16	—	1	1	—	2	*32*	*29*	*11*	*13*
Yorkshire, W. Riding ..	U.D.	70	79	26	21	—	196	4	8	5	6	23	58	*47*	17	20
	R.D.	23	23	8	5	—	59	1	2	1	1	5	45	*29*	14	*12*
Anglesey	U.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	R.D.	—	—	—	—	1	1	—	—	—	—	—	—	—	*3*	—
Brecknockshire	U.D.	—	4	—	—	—	4	1	—	—	—	1	*114*	*285*	*25*	*63*
	R.D.	1	—	—	—	—	1	—	—	—	—	—	*12*	—	*3*	—
Caernarvonshire	U.D.	—	1	—	—	1	2	—	—	—	—	—	*7*	—	*3*	—
	R.D.	—	1	—	—	—	1	—	—	—	1	1	*9*	—	*2*	*19*
Cardiganshire	U.D.	—	—	—	—	2	2	—	1	—	—	1	—	*29*	*11*	*54*
	R.D.	—	—	—	—	—	—	—	—	—	1	1	—	—	—	*28*
Carmarthenshire	U.D.	4	1	—	1	1	7	—	—	—	—	—	*35*	—	*10*	—
	R.D.	1	1	2	—	2	6	—	—	—	—	—	*10*	—	*6*	—
Denbighshire	U.D.	—	1	1	—	—	2	—	—	—	—	—	*6*	—	*3*	—
	R.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Flintshire	U.D.	4	2	1	1	—	8	—	—	—	—	—	*38*	—	*11*	—
	R.D.	—	5	—	—	—	5	—	—	—	—	—	*32*	—	*7*	—
Glamorganshire	U.D.	33	7	2	9	1	52	3	—	—	3	6	32	*24*	10	*11*
	R.D.	6	3	—	1	—	10	—	—	—	—	—	*20*	—	*5*	—
Merionethshire	U.D.	—	—	—	—	—	—	—	—	—	1	1	—	—	—	*57*
	R.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Monmouthshire	U.D.	16	6	3	4	—	29	2	1	1	2	6	33	*45*	11	*22*
	R.D.	1	1	—	3	—	5	—	—	—	—	—	*21*	—	*12*	—
Montgomeryshire	U.D.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	R.D.	1	1	1	—	—	3	—	—	—	—	—	*32*	—	*11*	—
Pembrokeshire	U.D.	—	1	—	—	—	1	—	—	—	—	—	*10*	—	*2*	—
	R.D.	—	1	—	—	—	1	—	—	—	—	—	*10*	—	*2*	—
Radnorshire	U.D.	1	—	—	—	—	1	—	—	—	—	—	*79*	—	*15*	—
	R.D.	—	—	—	1	—	1	—	—	—	—	—	—	—	*7*	—

37. Acute Infectious Encephalitis (Lethargic or Epidemic).—After amendments of diagnosis there were 30 notified cases of this disease in 1948 and 49 in 1949. As Table LXXXII indicates, notifications have been declining progressively since 1931.

Table LXXXII.—Acute Infectious Encephalitis : Notifications and Deaths.* 1931 to 1949

Year	Number of notifications	Number of deaths			
		Acute form	Sequelæ	Unspecified	Total
1931	654	?	?	?	771
1932	564	?	?	?	662
1933	432	?	?	?	654
1934	411	?	?	?	632
1935	329	?	?	?	579
1936	269	?	?	?	574
1937	217	?	?	?	599
1938	194	?	?	?	516
1939	159	37	223	312	572
1940	211	49	356	324	729
1941	191	36	363	305	704
1942	148	29	330	231	590
1943	109	20	304	171	495
1944	(*a*) 88 (*b*) 79	14	244	159	417
1945	(*a*) 93 (*b*) 76	32	288	141	461
1946	(*a*) 90 (*b*) 78	33	314	90	437
1947	(*a*) 84 (*b*) 68	73	259	94	426
1948	(*a*) 36 (*b*) 30	80	192	101	373
1949	(*a*) 56 (*b*) 49	65	194	103	362

* Deaths are corrected to 1940 Classification.

(*a*) Original notifications. (*b*) Corrected for diagnosis revision.

As in 1947 numbers of notifications were exceeded by numbers of deaths certified as from acute encephalitis, which were 80 in 1948 and 65 in 1949. In addition 192 deaths in 1948 and 194 in 1949 were described as due to late results of acute encephalitis, and 101 and 103 were unspecified as to whether acute or delayed.

The Comparative Mortality Index of encephalitis lethargica was 1·543 in 1921–25 and 1·861 in 1926–30. Since then it has been falling steadily each year, and was 0·662 in 1948 and 0·627 in 1949.

44b. Hodgkin's Disease (Pernicious lymphogranulomatosis).—Deaths assigned to this cause have been increasing in recent years. They averaged 538 per annum in 1931–39, and 592 per annum in 1940–45. Since 1946 annual deaths have been 662, 649, 687, and 699.

Table LXXXIII.—Hodgkin's Disease : Death Rates by Sex and Age*. 1911–45 and 1946 to 1949.

Ages	Mean annual death rates per million living																	
	1911–20		1921–30		1931–39		1940–42		1943–45		1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
All ages, crude ..	**10·2**	**5·4**	**14·1**	**7·3**	**17·6**	**9·2**	**17·8**	**9·6**	**18·9**	**10·5**	**21·0**	**10·4**	**20·3**	**10·2**	**21·3**	**10·6**	**21·3**	**10·9**
Ages 0–64, E.A.D.R.	10·8	5·7	14·5	7·3	17·8	8·5	17·7	8·7	18·7	9·4	20·4	9·1	18·8	9·1	20·8	9·2	21·0	9·8
0–	6·6	2·4	6·8	2·5	7·3	2·2	6·1	2·0	4·5	1·7	3·8	2·3	4·9	1·8	5·0	0·9	3·5	0·7
15–	7·7	4·5	11·3	5·5	12·4	6·6	10·3	6·0	12·1	7·5	13·1	8·3	12·2	6·0	10·9	7·1	13·4	8·6
25–	9·1	4·2	12·4	6·5	16·7	9·1	17·5	8·7	19·2	11·9	23·8	11·7	21·4	12·4	18·0	9·7	21·8	10·4
35–	9·7	5·4	15·0	6·6	18·5	10·0	19·0	9·6	19·6	9·1	24·3	8·2	22·4	8·8	27·0	10·8	31·3	12·3
45–	13·7	7·7	18·1	8·9	23·8	10·8	24·4	12·6	25·8	12·2	31·5	11·9	21·1	11·8	26·5	13·0	30·2	15·1
55–	20·2	11·8	27·2	16·5	33·6	15·6	34·5	16·7	37·8	18·0	34·0	15·7	37·3	17·6	45·0	17·8	34·5	16·5
65–	28·8	13·5	34·2	18·8	33·5	20·1	33·3	18·7	36·6	20·6	37·8	24·4	47·8	19·9	39·4	22·9	38·5	22·0
75 and over ..	15·1	11·5	25·5	15·3	28·9	19·4	29·0	20·7	28·2	20·2	31·7	13·1	42·1	18·5	47·0	21·0	22·0	16·1

* Including deaths of non-civilians in England and Wales, and based upon mid-year populations before 1940 and total populations inclusive of Armed Forces at home and abroad in 1940–49. Rates prior to 1940 accord with the 1940 classification.

The crude death rates at " all ages " and the equivalent average death rates at ages under 65 (Table LXXXIII) indicate gradual but steadily increasing mortality certified to this cause in each sex since 1911–20, with male rates always about double female rates.

It was noted in the Text for 1946–47 that, although the death rates were lowest in childhood and increased with advancing age, the rates for women aged 25–34 exceeded those for the next highest age group in 1943–45 and each of the years 1946 and 1947. Whether this was of significance or not, the phenomenon did not recur in 1948 or 1949, and the regular progression of death rates with advancing age was undisturbed.

Table LXXXIV.—Hodgkin's Disease : Number of Deaths and Death Rates per million living at all ages in Regions. 1948, 1949. (Civilians only).

Area	Number of deaths registered				Rate per million living			
	M.		F.		M.		F.	
	1948	1949	1948	1949	1948	1949	1948	1949
England and Wales	**441**	**451**	**237**	**246**	**22**	**22**	**11**	**11**
Greater London	100	95	62	56	26	24	14	13
Remainder of South East ..	70	62	46	46	23	21	13	13
North I	17	26	7	7	15	23	6	6
North II	13	18	7	4	20	28	10	6
North III	40	35	12	24	23	20	7	13
North IV	64	69	41	30	22	23	12	9
Midland I..	46	51	20	24	18	20	7	9
Midland II	26	15	11	22	20	11	8	16
East	23	21	12	16	24	22	12	16
South West	11	24	11	10	10	23	9	8
Wales I	24	19	2	6	27	21	2	6
Wales II	7	16	6	1	20	46	16	3
County boroughs*	130	129	57	63	21	21	8	9
Other urban districts*	145	145	66	82	22	22	9	11
Rural districts*	66	82	52	45	17	21	13	11

* Excluding Greater London.

Numbers of deaths and death rates in 1948 and 1949 in geographical regions and density aggregates (Table LXXXIV) call for no comment other than that the number of deaths involved is hardly sufficient to point to any definite pattern of regional variation.

45–55. Cancer and Other Malignant Tumours.—Cancer and other malignant tumours (excluding Hodgkin's disease and leukæmia, which were not included in this section of the International List as used up to 1949) were responsible for 160,285 deaths among civilians and non-civilians during 1948 and 1949. As deaths from all causes were 980,634, malignant tumours accounted for 16 per cent. of the total.

Table LXXXV.—Cancer of All Sites : Death rates per million living* by Sex and Age in 1936–39 and each year 1940 to 1949.

	1936–39†	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
						Males					
All Ages	**1,595**	**1,648**	**1,675**	**1,699**	**1,739**	**1,724**	**1,790**	**1,816**	**1,870**	**1,903**	**1,923**
Ages 0–64, E.A.D.R.	1,070	1,087	1,091	1,083	1,088	1,090	1,135	1,138	1,173	1,189	1,179
0–	49	49	61	42	51	37	48	42	63	49	60
5–	25	29	29	29	30	31	30	36	32	33	36
15–	58	54	50	53	55	60	54	59	67	59	64
25–	146	129	153	129	134	130	155	138	150	141	134
35–	469	493	505	507	501	508	517	525	548	521	498
45–	1,624	1,684	1,680	1,704	1,729	1,725	1,792	1,874	1,877	1,928	1,894
55–	4,610	4,650	4,647	4,596	4,597	4,610	4,803	4,743	4,918	5,022	5,008
65–	9,690	9,729	9,821	9,959	9,878	9,627	9,705	9,679	9,924	10,093	10,197
75 and over ..	14,346	14,714	14,248	13,815	14,199	13,528	13,585	14,181	14,535	14,588	15,078
						Females					
All Ages	**1,601**	**1,645**	**1,643**	**1,664**	**1,687**	**1,676**	**1,699**	**1,732**	**1,750**	**1,758**	**1,769**
Ages 0–64, E.A.D.R.	1,065	1,053	1,045	1,045	1,039	1,029	1,011	1,021	1,003	998	980
0–	40	40	37	41	33	47	46	46	54	48	61
5–	21	22	26	27	24	23	27	22	18	21	24
15–	44	42	38	42	46	39	39	38	42	45	43
25–	161	164	175	169	174	165	165	159	159	154	161
35–	718	688	692	691	689	675	669	684	677	640	653
45–	2,012	2,018	2,010	1,975	1,960	1,958	1,900	1,929	1,891	1,890	1,836
55–	3,946	3,893	3,831	3,871	3,843	3,807	3,747	3,780	3,707	3,715	3,621
65–	7,022	7,071	6,833	6,871	6,762	6,588	6,645	6,720	6,676	6,617	6,630
75 and over ..	10,950	10,717	10,552	10,280	10,418	10,020	10,165	10,441	10,891	10,741	10,916

* Including deaths of non-civilians in England and Wales, and based upon mid-year populations in 1936–39 and total populations inclusive of Armed Forces at home and abroad in 1940 to 1949.

† Rates for 1936–39 accord with the classification in use from 1940 onwards, the deaths being those regarded by the certifier as caused by cancer, defined as in the Fifth Revision of the International List.

Table LXXXV shows that the mortality rate from malignant tumours per million living rises steadily from 5–14 years, when it is minimal, through the successive age groups from youth to age. But although it strikes with greatest frequency among those aged 75 and over, the proportion which deaths from cancer bear to all other deaths is *relatively* highest between the ages of 45 and 65. It is then responsible for about a quarter of the total mortality among males and over a third among females. The importance of malignant tumour as a cause of death, and the gravity of its incursions, are emphasized by the fact that about 30 per cent. of the toll which it at present levies each year on the community is exacted before the age of 60.

Cancer mortality by Site in 1948 and 1949.—Tables LXXXVI and LXXXVII distinguish cancer deaths (including those of non-civilians) in 1948 and 1949 according to the site of the primary neoplasm when that was known, or according to the part of the body affected if the primary site was unknown. The sites are shown in greater detail than the International List.

For many of the deaths known to be due to internal cancer, one or other of several reasons may make it impossible to confirm the diagnosis by autopsy, biopsy or operation. The certifying practitioner is not, therefore, always able to designate the site and the type of cancer precisely. Among the elderly, internal cancer may first come to his attention following on metastatic spread, and the actual site of the primary may remain unknown. The best the practitioner can do in these cases is to put on record in the certificate his *opinion* as to the site and nature of the primary growth.

Table LXXXVII shows the deaths for each site or part by age and sex, while Table LXXXVI classifies the deaths at each site (with the exception of 54a, Glioma of brain and other central nervous system) according to an elementary histological classification :—whether carcinoma, sarcoma or undefined cancer. The important group of brain tumours is considered separately on page 167.

Table LXXXVIa.—Cancer of different Forms and Sites : Deaths[1] from Carcinoma, Sarcoma and Undefined Cancer and per cent. of all Cancers by Sex, 1948.

International List No.	Site	Males						Females					
		Number of deaths			Percentage of all Cancers			Number of deaths			Percentage of all Cancers		
		Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer
	All Sites	**36,386**	**1,546**	**1,722**	**92**	**4**	**4**	**36,129**	**1,280**	**1,721**	**93**	**3**	**4**
45a	Lips	135	—	4	97	—	3	12	—	1	92	—	8
45b	Tongue	555	1	26	96	0	4	131	—	6	96	—	4
45c	Mouth	189	—	12	94	—	6	35	2	3	87	5	8
	Tonsil	123	21	7	81	14	5	32	11	2	72	24	4
	Pharynx	274	7	15	93	2	5	106	10	5	88	8	4
	Jaw	156	29	7	81	15	4	60	25	6	66	27	7
	Others[2]	148	7	7	92	4	4	32	3	2	87	8	5
	Total	1,580	65	78	91	4	5	408	51	25	84	11	5
46a	Œsophagus	1,449	—	53	96	—	4	787	—	23	97	—	3
46b	Stomach	7,818	4	362	96	0	4	5,971	5	249	96	0	4
	Duodenum	33	—	2	94	—	6	20	—	1	95	—	5
46c	Small intestine	46	15	7	68	22	10	48	6	4	83	10	7
	Cæcum	330	4	10	96	1	3	409	2	10	98	0	2
	Hepatic flexure	125	—	2	98	—	2	152	—	6	96	—	4
	Splenic flexure												
	Sigmoid flexure	672	—	22	97	—	3	736	—	22	97	—	3
	Large intestine (colon)	3,287	4	93	97	0	3	4,304	1	135	97	0	3
	Other and undefined intestine	36	9	6	70	18	12	55	6	7	81	9	10
46d	Rectum (not anus)	3,756	4	148	96	0	4	2,461	1	90	96	0	4
46e	Liver	753	10	69	91	1	8	759	6	71	91	1	8
	Gall bladder and ducts	263	—	10	96	—	4	535	—	22	96	—	4
46f	Pancreas	1,395	2	55	96	0	4	1,274	2	49	96	0	4
46g	Peritoneum, mesentery, others	63	81	9	41	53	6	145	90	11	59	37	4
46h	Other and unspecified digestive organs	2	—	—	100	—	—	6	—	—	100	—	—
	Total	20,028	133	848	95	1	4	17,662	119	700	95	1	4
47a	Larynx, trachea	823	6	41	94	1	5	277	—	15	95	—	5
47b	Lung, bronchus, pleura	8,060	38	308	96	0	4	1,656	19	80	94	1	5
	Mediastinum	102	73	39	48	34	18	55	30	26	50	27	23
47c	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—
	Total	8,985	117	388	95	1	4	1,988	49	121	92	2	6
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
48a	Cervix uteri	—	—	—	—	—	—	1,823	5	45	98	0	2
48b	Corpus uteri	—	—	—	—	—	—	325	2	11	96	1	3
	Other and undefined uterus	—	—	—	—	—	—	1,916	82	112	91	4	5
	Total	—	—	—	—	—	—	4,064	89	168	94	2	4
49	Ovary and Fallopian tube	—	—	—	—	—	—	2,077	16	158	92	1	7
	Vulva and vagina	—	—	—	—	—	—	418	9	8	96	2	2
	Other female genital organs	—	—	—	—	—	—	3	2	—	60	40	—
	Total	—	—	—	—	—	—	2,498	27	166	93	1	6
50	Breast	60	1	3	93	2	5	7,496	16	332	96	0	4
51a	Scrotum	39	—	1	98	—	2	—	—	—	—	—	—
51b	Prostate	2,646	9	126	95	0	5	—	—	—	—	—	—
51c	Testis	112	83	9	55	41	4	—	—	—	—	—	—
	Penis	111	—	5	96	—	4	—	—	—	—	—	—
	Others	—	—	—	—	—	—	—	—	—	—	—	—
	Total	2,908	92	141	93	3	4	—	—	—	—	—	—
52	Kidney	210	291	28	40	55	5	140	220	21	37	57	6
	Bladder, urethra, ureter	1,490	7	46	97	0	3	685	2	25	96	0	4
	Total	1,700	298	74	82	14	4	825	222	46	76	20	4
53	Skin (not scrotum)	435	95	11	80	18	2	317	111	1	74	26	0
54b, c	Brain, meninges	35	18	76	27	14	59	19	7	68	20	7	73
	Other nervous system[3]	3	12	2	18	70	12	3	14	2	16	73	11
	Total	38	30	78	26	21	53	22	21	70	19	19	62
55a	Adrenal glands	29	7	8	66	16	18	11	6	7	46	25	29
55b, d : 1	Ethmoid, nose	97	10	2	89	9	2	81	7	2	90	8	2
	Other bone (not jaw)	73	259	22	21	73	6	90	224	28	26	66	8
55c	Thyroid gland	73	1	3	95	1	4	211	2	18	91	1	8
55d : 2	Other and unspecified [4]	380	438	66	43	50	7	456	336	37	55	41	4
	Total	652	715	101	44	49	7	849	575	92	56	38	6

[1] Including deaths of non-civilians registered in England and Wales; [2] Including palate, cheek (internal surface), salivary glands, gums; [3] Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system; [4] Includes lymphatic glands, abdomen, eye (except as above), muscle, etc. There were, in addition, the following numbers of deaths from glioma, comprising the varieties specified in No. 54a, Manual of International List, 1940, which are not included in the table :—Males, 476; Females, 277.

Table LXXXVIb.—Cancer of different Forms and Sites : Deaths[1] from Carcinoma, Sarcoma and Undefined Cancer and per cent. of all Cancers by Sex, 1949.

International List No.	Site	Males						Females					
		Number of deaths			Percentage of all Cancers			Number of deaths			Percentage of all Cancers		
		Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer	Carcinoma	Sarcoma	Undefined Cancer
	All Sites	**37,083**	**1,609**	**1,650**	**92**	**4**	**4**	**36,567**	**1,354**	**1,624**	**92**	**3**	**4**
45a	Lips	156	—	4	98	—	2	18	—	1	95	—	5
45b	Tongue	470	—	29	94	—	6	150	1	5	96	1	3
45c	Mouth	187	—	1	99	—	1	45	1	—	98	2	—
	Tonsil	115	12	4	88	9	3	25	9	4	66	24	10
	Pharynx	301	10	14	93	3	4	136	10	4	90	7	3
	Jaw	141	26	13	78	15	7	65	14	4	78	17	5
	Others[2]	138	5	4	94	3	3	39	—	1	97	—	3
	Total	1,508	53	69	93	3	4	478	35	19	90	7	3
46a	Œsophagus	1,392	—	48	97	—	3	755	—	31	96	—	4
46b	Stomach	7,773	5	292	96	—	4	5,920	2	216	96	—	4
	Duodenum	29	1	4	85	3	12	16	—	4	80	—	20
46c	Small intestine	53	11	8	74	15	11	59	8	3	84	12	4
	Cæcum	333	1	8	98	—	2	458	1	16	97	—	3
	Hepatic flexure	97	—	4	96	—	4	160	—	5	97	—	3
	Splenic flexure												
	Sigmoid flexure	687	1	23	97	—	3	745	1	30	96	—	4
	Large intestine (colon)	3,222	6	89	97	—	3	4,337	1	125	97	—	3
	Other and undefined intestine	38	13	3	70	24	6	45	12	10	67	18	15
46d	Rectum (not anus)	3,631	2	133	96	—	4	2,512	2	95	96	—	4
46e	Liver	702	8	54	92	1	7	705	3	59	92	—	8
	Gall bladder and ducts	276	—	12	96	—	4	580	—	28	95	—	5
46f	Pancreas	1,474	—	42	97	—	3	1,310	1	52	96	—	4
46g	Peritoneum, mesentery, others	76	94	5	43	54	3	144	79	11	61	34	5
46h	Other and unspecified digestive organs	4	—	—	100	—	—	4	1	1	66	17	17
	Total	19,787	142	725	96	1	3	17,750	111	686	96	—	4
47a	Larynx, trachea	810	—	26	97	—	3	281	1	5	98	—	2
47b	Lung, bronchus, pleura	8,767	41	342	96	—	4	1,756	22	69	95	1	4
	Mediastinum	71	81	49	35	40	25	42	37	19	43	38	19
47c	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—
	Total	9,648	122	417	95	1	4	2,079	60	93	93	3	4
		(*a*)	(*b*)	(*c*)	(*d*)	(*e*)	(*f*)	(*g*)	(*h*)	(*i*)	(*j*)	(*k*)	(*l*)	(*m*)	(*n*)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
48a	Cervix uteri	—	—	—	—	—	—	2,083	5	50	98	—	2
48b	Corpus uteri	—	—	—	—	—	—	498	15	10	95	3	2
	Other and undefined uterus	—	—	—	—	—	—	1,427	75	84	90	5	5
	Total	—	—	—	—	—	—	4,008	95	144	94	2	4
49	Ovary and Fallopian tube	—	—	—	—	—	—	2,195	18	148	93	1	6
	Vulva and vagina	—	—	—	—	—	—	390	13	8	95	3	2
	Other female genital organs	—	—	—	—	—	—	4	—	—	100	—	—
	Total	—	—	—	—	—	—	2,589	31	156	93	1	6
50	Breast	72	4	2	92	5	3	7,550	19	307	96	—	4
51a	Scrotum	27	1	—	96	4	—	—	—	—	—	—	—
51b	Prostate	2,821	6	138	95	—	5	—	—	—	—	—	—
51c	Testis	107	88	5	54	44	3	—	—	—	—	—	—
	Penis	122	—	2	98	—	2	—	—	—	—	—	—
	Others	—	—	—	—	—	—	—	—	—	—	—	—
	Total	3,149	99	147	93	3	4	7,550	19	307	96	—	4
52	Kidney	226	301	30	41	54	5	159	208	17	41	54	5
	Bladder, urethra, ureter	1,576	5	45	97	—	3	671	4	26	96	—	4
	Total	1,802	306	75	83	14	3	830	212	43	76	20	4
53	Skin (not scrotum)	428	91	6	82	17	1	340	121	4	73	26	1
54b, c	Brain, meninges	40	8	101	27	5	68	15	8	63	18	9	73
	Other nervous system[2]	7	18	1	27	69	4	6	19	4	21	65	14
	Total	475	117	108	68	17	15	361	148	71	62	26	12
55a	Adrenal glands	20	6	6	62	19	19	27	9	9	60	20	20
55b, d : 1	Ethmoid, nose	108	9	5	89	7	4	66	12	8	77	14	9
	Other bone (not jaw)	79	274	29	21	72	7	110	258	18	28	67	5
55c	Thyroid gland	75	1	7	90	1	9	235	5	14	92	2	6
55d : 2	Other and unspecified [4]	432	480	62	44	49	7	484	359	56	54	40	6
	Total	714	770	109	45	48	7	922	643	105	55	39	6

[1] Including deaths of non-civilians registered in England and Wales; [2] Including palate, cheek (internal surface), salivary glands, gums; [3] Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system; [4] Includes lymphatic glands, abdomen, eye (except as above), muscle, etc. There were, in addition, the following numbers of deaths from glioma, comprising the varieties specified in No. 54a, Manual of International List 1940, which are not included in the table :—Males, 511; Females, 350.

Table LXXXVIIa.—Cancer of different Forms and Sites: Deaths by Sex and Age (Including those of non-civilians registered in England and Wales), 1948.

Int. List No.	Form of Cancer and Site	MALES (Age last birthday)															
		All Ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85 and over
	All Sites	**40,130**	**91**	**94**	**180**	**462**	**602**	**1,155**	**2,105**	**3,057**	**4,346**	**5,803**	**6,897**	**6,950**	**5,112**	**2,414**	**862**
	Carcinoma	36,386	15	15	61	297	458	970	1,824	2,728	3,927	5,315	6,396	6,477	4,818	2,263	822
	Lymphosarcoma, Reticulosarcoma	286	7	10	18	20	18	29	25	18	32	35	28	32	12	2	—
	Other Sarcoma	1,260	44	37	69	80	65	64	84	111	136	171	155	127	70	41	6
	Glioma	476	21	26	20	45	30	53	81	63	55	48	28	5	1	—	—
	Cancer Undefined	1,722	4	6	12	20	31	39	91	137	196	234	290	309	211	108	34
45a	Lips	139	—	—	—	—	—	—	5	2	6	5	25	26	38	20	12
45b	Tongue	582	—	—	—	2	3	2	10	13	42	62	124	129	109	61	25
45c	Mouth	201	—	—	—	—	—	2	2	11	4	21	38	55	35	25	8
	Tonsil	151	—	1	—	2	—	4	4	8	15	26	22	24	21	17	7
	Pharynx	296	2	2	3	1	2	11	12	11	23	30	58	58	56	23	4
	Jaw, Sarcoma	28	2	—	—	2	2	3	1	4	3	1	1	3	—	5	1
	Jaw, Other	164	—	—	—	1	2	1	6	9	11	16	27	38	27	20	6
	Others (1)	162	—	1	1	2	1	1	5	5	12	14	37	31	27	21	4
	Total	**1,723**	**4**	**4**	**4**	**10**	**10**	**24**	**45**	**63**	**116**	**175**	**332**	**364**	**313**	**192**	**67**
46a	Œsophagus	1,502	—	—	—	7	10	13	30	74	122	196	284	344	273	116	33
46b	Stomach	8,184	—	1	8	54	102	254	418	600	942	1,257	1,458	1,512	1,016	436	126
	Duodenum	35	—	—	—	—	—	2	3	4	9	4	1	6	3	3	—
46c	Small intestine	68	—	2	1	2	3	4	5	8	10	10	7	10	4	1	1
	Cæcum	344	—	—	4	10	5	13	11	18	32	35	51	61	63	29	12
	Hepatic flexure	127	—	—	—	—	2	—	2	7	6	15	26	24	28	10	7
	Splenic flexure																
	Sigmoid flexure	694	—	—	1	7	9	11	24	37	55	92	128	127	136	48	19
	Large intestine (colon)	3,384	1	1	7	27	44	61	109	167	235	374	570	752	590	323	123
	and undefined intestine	51	—	1	1	2	1	3	2	3	3	7	9	10	7	1	1
46d	Rectum (not anus)	3,908	—	—	6	28	37	83	132	184	316	497	734	865	643	299	84
46e	Liver	832	1	1	2	6	10	19	35	59	89	116	139	147	126	58	24
	Gall bladder and ducts	273	—	—	—	1	3	4	10	15	23	39	45	64	37	24	8
46f	Pancreas	1,452	—	—	1	10	16	34	70	105	139	226	252	241	223	89	46
46g	Peritoneum, mesentery, others	153	11	5	1	9	10	6	11	12	16	22	17	10	14	7	2
46h	Other and unspecified digestive organs	2	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
	Total	**21,009**	**13**	**11**	**32**	**163**	**252**	**507**	**862**	**1,293**	**1,997**	**2,891**	**3,722**	**4,173**	**3,163**	**1,444**	**486**
(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*	*(j)*	*(k)*	*(l)*	*(m)*	*(n)*	*(o)*	*(p)*	*(q)*	*(r)*

(a)	(b)	(c)	(d	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
47a	Larynx, trachea	870	—	—	—	4	10	19	42	48	90	122	182	164	114	51	24
47b	Lung, bronchus, pleura	8,406	—	2	17	107	169	380	782	1,192	1,454	1,618	1,385	795	363	109	33
	Mediastinum	214	1	4	10	4	7	8	23	20	34	27	29	25	16	5	1
	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	9,490	1	6	27	115	186	407	847	1,260	1,578	1,767	1,596	984	493	165	58
50	Breast	64	—	—	—	—	—	2	1	2	6	4	24	10	7	8	—
51a	Scrotum	40	—	—	—	—	1	2	6	6	2	6	4	7	3	2	1
51b	Prostate	2,781	2	1	—	1	—	7	11	40	127	290	505	729	621	324	123
51c	Testis	204	2	2	16	48	27	21	21	11	13	16	10	7	4	5	1
	Penis	116	—	—	—	1	3	1	5	4	7	13	17	21	20	17	7
	Others	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	3,141	4	3	16	50	31	31	43	61	149	325	536	764	648	348	132
52	Kidney	529	21	8	3	10	14	18	38	57	62	99	84	63	34	15	3
	Bladder, urethra, ureter	1,543	—	—	—	1	11	25	59	91	156	226	285	297	230	115	47
	Total	2,072	21	8	3	11	25	43	97	148	218	325	369	360	264	130	50
53	Skin (not scrotum)	541	2	1	7	9	11	15	14	23	34	46	67	77	107	75	53
54a	Glioma of brain and nervous system (2) ..	476	21	26	20	45	30	53	81	63	55	48	28	5	1	—	—
54b, c	Other cancer of brain and meninges ..	129	3	7	7	7	11	9	19	18	19	17	7	4	1	—	—
	Other cancer of other nervous system (3)	17	3	1	1	4	—	1	1	2	1	1	2	—	—	—	—
	Total	622	27	34	28	56	41	63	101	83	75	66	37	9	2	—	—
55a	Adrenal glands	44	4	6	—	2	—	1	9	3	6	7	4	—	1	—	1
55b, d : 1	Ethmoid, nose	109	1	—	—	1	4	4	9	12	12	16	15	16	12	4	3
	Other bone (not jaw)	354	1	8	42	18	8	13	17	29	36	48	49	45	29	10	1
55c	Thyroid gland	77	—	—	1	1	3	1	7	4	9	13	14	13	8	3	—
55d : 2	Other and unspecified (4)	884	13	13	20	26	31	44	53	76	110	120	132	135	65	35	11
	Total	1,468	19	27	63	48	46	63	95	124	173	204	214	209	115	52	16

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes glioma of eye.
(3) Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system.
(4) Includes lymphatic glands, abdomen, eye (except as above), muscle, etc.

Table LXXXVIIa.—Cancer of different Forms and Sites : Deaths by Sex and Age (Including those of non-civilians registered in England and Wales), 1948.

Int. List No.	Form of Cancer and Site	FEMALES (age last birthday)															
		All Ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85 and over
	All Sites	**39,407**	**85**	**58**	**132**	**504**	**756**	**1,432**	**2,347**	**3,342**	**4,058**	**5,117**	**5,677**	**6,168**	**5,093**	**3,043**	**1,595**
	Carcinoma	36,129	8	8	51	392	667	1,262	2,108	3,037	3,722	4,729	5,219	5,757	4,786	2,873	1,510
	Lymphosarcoma, Reticulosarcoma	171	5	2	12	6	4	8	13	23	18	18	22	17	14	8	1
	Other Sarcoma	1,109	48	29	41	49	30	62	68	106	114	157	163	119	69	33	21
	Glioma	277	17	15	15	23	24	21	35	45	36	17	18	6	3	1	1
	Cancer Undefined	1,721	7	4	13	34	31	79	123	131	168	196	255	269	221	128	62
45a	Lips	13	—	—	—	—	—	—	—	—	—	2	1	1	3	2	4
45b	Tongue	137	—	—	—	1	1	1	9	10	13	12	24	24	21	14	7
45c	Mouth	40	—	—	—	—	1	—	1	3	2	2	7	8	8	6	2
	Tonsil	45	—	—	1	—	—	1	5	4	3	8	5	4	4	6	4
	Pharynx	121	—	2	2	3	3	2	7	11	13	19	21	19	12	5	2
	Jaw, Sarcoma	25	—	1	—	—	—	—	3	2	4	2	4	3	2	1	3
	Jaw, Other	66	—	—	1	1	1	2	3	11	4	6	12	11	7	5	2
	Others (1)	37	—	1	—	—	—	—	2	2	1	5	7	5	4	8	2
	Total	484	—	4	4	5	6	6	30	43	40	56	81	75	61	47	26
46a	Œsophagus	810	—	—	—	6	6	17	30	48	86	110	119	157	124	72	35
46b	Stomach	6,225	—	—	2	51	66	132	199	305	506	738	1,011	1,227	1,083	625	280
	Duodenum	21	—	—	—	1	—	2	—	—	2	5	2	5	2	2	—
	Small intestine	58	—	—	1	2	—	2	2	7	7	8	9	8	6	4	2
	Cæcum	421	—	—	—	7	1	12	9	23	27	38	72	85	85	40	22
	Hepatic flexure	158	—	—	1	—	1	1	3	12	16	19	15	39	22	21	8
46c	Splenic flexure																
	Sigmoid flexure	758	—	—	—	8	10	16	32	49	68	110	103	145	122	62	33
	Large intestine (colon)	4,440	—	—	9	28	47	77	175	239	341	481	614	801	789	544	295
	Other and undefined intestine	68	—	—	2	—	1	—	1	9	7	8	9	9	8	10	4
46d	Rectum (not anus)	2,552	—	—	2	26	38	55	113	148	228	319	381	454	380	276	132
46e	Liver	836	2	—	—	8	11	12	32	45	65	104	133	155	150	78	41
	Gall bladder and ducts	557	—	—	—	2	2	4	22	35	47	81	95	112	83	46	28
46f	Pancreas	1,325	—	—	3	11	3	26	36	85	126	184	229	228	208	116	70
46g	Peritoneum, mesentery, others	246	1	2	7	6	3	16	17	30	29	33	34	35	20	7	6
46h	Other and unspecified digestive organs	6	—	—	—	—	—	—	—	1	—	3	1	—	1	—	—
	Total	18,481	3	2	27	156	189	372	671	1,036	1,555	2,241	2,827	3,460	3,083	1,903	956
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)

		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
47a	Larynx, trachea	292	—	—	1	1	7	8	18	26	40	44	45	45	31	17	9
47b	Lung, bronchus, pleura	1,755	1	2	4	28	32	85	126	201	206	266	303	254	148	74	25
	Mediastinum	111	—	1	1	3	1	4	6	13	7	15	15	26	16	2	1
47c	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	2,158	1	3	6	32	40	97	150	240	253	325	363	325	195	93	35
48a	Cervix uteri	1,873	1	—	1	39	50	120	197	278	292	294	214	184	110	64	29
48b	Corpus uteri	338	—	—	—	1	1	8	12	34	36	81	47	59	34	20	5
	Other and undefined uterus	2,110	—	—	4	27	45	64	160	231	269	294	320	308	223	114	51
	Total	4,321	1	—	5	67	96	192	369	543	597	669	581	551	367	198	85
49	Ovary and Fallopian tube	2,251	—	3	15	49	78	146	237	320	322	307	316	227	153	61	17
	Vulva and vagina	435	2	—	—	3	2	12	16	14	34	58	69	74	72	49	30
	Other female genital organs	5	—	—	—	—	—	—	—	1	1	1	1	1	—	—	—
	Total	2,691	2	3	15	52	80	158	253	335	357	366	386	302	225	110	47
50	Breast	7,844	—	—	4	99	254	468	684	862	930	1,056	956	980	784	468	299
52	Kidney	381	25	9	1	9	9	17	15	31	51	49	65	49	31	17	3
	Bladder, urethra, ureter	712	—	—	—	—	4	10	18	40	49	95	120	139	130	69	38
	Total	1,093	25	9	1	9	13	27	33	71	100	144	185	188	161	86	41
53	Skin	429	—	2	5	12	6	15	17	18	22	33	46	58	71	55	69
54a	Glioma of brain and nervous system (2) ..	277	17	15	15	23	24	21	35	45	36	17	18	6	3	1	1
54b, c	Other cancer of brain and meninges ..	94	3	2	7	8	8	10	13	11	11	7	7	3	3	1	—
	Other cancer of other nervous system (3)	19	4	1	—	4	2	2	2	—	—	1	1	1	1	—	—
	Total	390	24	18	22	35	34	33	50	56	47	25	26	10	7	2	1
55a	Adrenal glands	24	8	2	—	2	3	2	1	1	1	—	2	1	1	—	—
55b,	Ethmoid, nose	90	1	—	1	3	2	4	2	7	10	12	7	14	16	10	1
d : 1	Other bone (not jaw)	342	10	8	25	10	12	12	16	32	30	45	44	44	31	13	10
55c	Thyroid gland	231	—	—	1	2	1	8	10	16	27	37	45	40	23	16	5
55d : 2	Other and unspecified (4)	829	10	7	16	20	20	38	61	82	89	108	128	120	68	42	20
	Total	1,516	29	17	43	37	38	64	90	138	157	202	226	219	139	81	36

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes glioma of eye.
(3) Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system.
(4) Includes lymphatic glands, abdomen, eye (except as above), muscle, etc.

Table LXXXVIIb.—Cancer of different Forms and Sites : Deaths by Sex and Age (Including those of non-civilians registered in England and Wales), 1949.

Int. List No.	Form of Cancer and Site	MALES (Age last birthday)															
		All Ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85 and over
	All Sites	**40,853**	**113**	**107**	**190**	**437**	**539**	**1,150**	**2,131**	**3,077**	**4,324**	**5,828**	**6,917**	**7,114**	**5,361**	**2,609**	**956**
	Carcinoma	37,083	11	12	65	262	413	956	1,871	2,743	3,920	5,321	6,432	6,682	5,039	2,457	899
	Lymphosarcoma, Reticulosarcoma	350	13	17	18	23	21	23	28	46	34	42	34	31	18	1	1
	Other Sarcoma	1,259	60	38	69	89	47	75	85	112	123	162	158	119	72	35	15
	Glioma	511	21	30	28	44	35	52	66	64	77	54	29	7	4	—	—
	Cancer Undefined	1,650	8	10	10	19	23	44	81	112	170	249	264	275	228	116	41
45a	Lips	160	—	—	—	—	1	1	1	6	7	6	15	33	41	31	18
45b	Tongue	499	—	—	—	1	5	—	10	13	30	45	91	133	107	55	9
45c	Mouth	188	—	—	—	1	1	2	4	6	6	22	31	36	45	25	9
	Tonsil	131	—	1	—	1	2	3	2	2	7	16	20	33	25	15	4
	Pharynx	325	1	3	2	3	4	7	16	18	17	40	63	65	55	20	11
	Jaw, Sarcoma	26	—	—	1	3	1	1	1	1	1	2	5	2	5	3	—
	Jaw, Other	154	—	—	1	—	1	1	7	6	9	12	29	33	29	19	7
	Others (1)	147	—	1	—	—	1	1	3	6	9	12	23	37	28	16	10
	Total	1,630	1	5	4	9	16	16	44	58	86	155	277	372	335	184	68
46a	Œsophagus	1,440	—	—	2	5	7	15	29	68	123	185	269	322	268	112	35
46b	Stomach	8,070	—	—	2	61	85	243	390	596	888	1,203	1,470	1,471	1,045	458	158
	Duodenum	34	—	—	—	—	—	1	1	3	4	3	11	9	1	1	—
46c	Small intestine	72	—	—	3	4	2	6	2	10	7	8	12	8	6	3	1
	Cæcum	342	—	—	—	1	4	8	20	20	26	49	71	49	55	31	8
	Hepatic flexure	101	—	—	—	1	2	4	6	5	5	15	26	15	12	7	3
	Splenic flexure																
	Sigmoid flexure	711	—	—	—	4	8	13	34	48	49	86	108	162	114	64	21
	Large intestine (colon)	3,317	1	1	3	23	39	75	102	153	220	381	554	692	607	324	142
	Other and undefined intestine	54	1	3	1	1	3	3	3	4	3	6	11	6	6	2	1
46d	Rectum (not anus)	3,766	—	—	9	24	42	58	107	183	267	475	651	857	658	335	100
46e	Liver	764	4	—	3	9	10	12	36	49	74	99	129	145	120	48	26
	Gall bladder and ducts	288	—	—	—	—	—	9	13	19	31	41	47	51	42	25	10
46f	Pancreas	1,516	—	—	—	3	15	31	82	105	191	217	278	266	210	91	27
46g	Peritoneum, mesentery, others	175	12	6	3	6	9	9	10	15	25	28	17	16	11	7	1
46h	Other and unspecified digestive organs	4	—	—	—	—	—	—	—	1	—	1	1	—	1	—	—
	Total	20,654	18	10	26	142	226	487	835	1,279	1,913	2,797	3,655	4,069	3,156	1,508	533
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
47a	Larynx, trachea	836	—	—	—	3	7	7	36	42	84	134	148	171	121	61	22
47b	Lung, bronchus, pleura	9,150	1	2	21	77	148	386	849	1,206	1,544	1,774	1,574	962	428	139	39
	Mediastinum	201	4	4	9	14	7	8	15	23	24	27	23	19	17	4	3
	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	10,187	5	6	30	94	162	401	900	1,271	1,652	1,935	1,745	1,152	566	204	64
50	Breast	78	—	—	—	1	—	2	4	5	13	9	9	16	14	4	1
51a	Scrotum	28	—	—	—	—	—	—	4	1	1	3	3	5	5	4	2
51b	Prostate	2,965	1	—	2	2	—	8	21	40	122	253	508	770	718	382	138
51c	Testis	200	1	3	32	51	24	29	15	9	6	5	7	10	5	3	—
	Penis	124	—	—	—	2	—	3	3	4	7	12	15	23	28	22	5
	Others	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	3,317	2	3	34	55	24	40	43	54	136	273	533	808	756	411	145
52	Kidney	557	29	12	3	8	7	26	48	58	67	76	94	74	35	15	5
	Bladder, urethra, ureter	1,626	3	—	—	2	5	26	57	98	153	243	280	314	260	134	51
	Total	2,183	32	12	3	10	12	52	105	156	220	319	374	388	295	149	56
53	Skin (not scrotum)	525	3	1	3	8	6	11	16	23	29	48	52	102	76	84	63
54a	Glioma of brain and nervous system (2)	510	21	30	27	44	35	52	66	64	77	54	29	7	4	—	—
54b, c	Other cancer of brain and meninges	150	5	9	6	7	7	18	24	18	24	17	8	5	2	—	—
	Other cancer of other nervous system (3)	25	5	3	2	2	2	—	4	4	—	2	—	—	1	—	—
	Total	685	31	42	35	53	44	70	94	86	101	73	37	12	7	—	—
55a	Adrenal glands	32	6	—	—	3	1	3	5	4	2	1	4	2	1	—	—
55b, d : 1	Ethmoid, nose	122	1	—	—	2	6	1	11	16	9	11	18	23	13	9	2
	Other bone (not jaw)	382	3	15	35	22	10	12	18	29	46	53	48	40	30	15	6
55c	Thyroid gland	83	—	—	—	3	3	2	1	6	10	11	14	12	10	7	4
55d : 2	Other and unspecified (4)	975	11	13	20	35	29	53	55	90	107	143	151	118	102	34	14
	Total	1,594	21	28	55	65	49	71	90	145	174	219	235	195	156	65	26

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes glioma of eye.
(3) Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system.
(4) Includes lymphatic glands, abdomen, eye (except as above), muscle, etc.

Table LXXXVIIb.—Cancer of different Forms and Sites : Deaths by Sex and Age (Including those of non-civilians registered in England and Wales), 1949.

Int. List No.	Form of Cancer and Site	FEMALES (Age last birthday)															
		All Ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85 and over
	All Sites	**39,895**	**109**	**68**	**125**	**523**	**809**	**1,429**	**2,394**	**3,209**	**4,114**	**4,901**	**5,864**	**6,176**	**5,224**	**3,224**	**1,726**
	Carcinoma	36,567	20	14	48	395	706	1,265	2,160	2,926	3,777	4,491	5,427	5,779	4,918	3,000	1,641
	Lymphosarcoma, Reticulosarcoma	208	5	4	14	12	7	11	21	21	20	31	22	23	11	5	1
	Other Sarcoma	1,146	50	28	41	54	38	64	73	100	104	150	162	122	88	52	20
	Glioma	350	24	16	15	43	24	27	39	44	51	34	20	9	3	1	—
	Cancer Undefined	1,624	10	6	7	19	34	62	101	118	162	195	233	243	204	166	64
45a	Lips	19	—	—	—	—	—	—	—	—	—	1	1	3	2	7	5
45b	Tongue	156	—	—	—	2	—	2	3	12	11	22	24	24	33	17	6
45c	Mouth	46	—	1	1	—	—	—	—	1	7	4	6	11	8	5	2
	Tonsil	38	—	1	—	1	1	3	—	1	3	3	7	7	6	4	1
	Pharynx	150	—	1	1	3	5	4	15	12	16	23	23	20	8	12	7
	Jaw, Sarcoma	13	—	1	—	—	—	—	1	—	—	3	—	3	5	—	—
	Jaw, Other	70	—	—	—	—	2	1	2	5	7	9	11	10	14	5	4
	Others (1)	40	1	—	—	—	1	—	1	4	5	3	4	7	5	8	1
	Total	532	1	4	2	6	9	10	22	35	49	68	76	85	81	58	26
46a	Œsophagus	786	—	—	—	3	8	21	22	47	82	93	134	140	134	69	33
46b	Stomach	6,138	—	—	3	44	77	105	199	317	456	697	996	1,237	1,109	615	283
	Duodenum	20	—	—	—	—	—	—	1	3	1	4	5	2	2	2	—
46c	Small intestine	70	—	—	1	—	2	2	4	7	8	9	10	14	7	4	2
	Cæcum	475	—	—	1	3	3	8	15	30	35	55	69	98	75	54	29
	Hepatic flexure	165	—	—	1	1	2	6	8	4	14	25	22	27	22	25	8
	Splenic flexure																
	Sigmoid flexure	776	—	—	—	6	14	18	31	52	73	102	110	128	110	85	47
	Large intestine (colon)	4,463	—	—	2	24	56	78	141	262	337	472	604	801	794	581	311
	Other and undefined intestine	67	1	—	1	1	1	2	2	6	7	9	12	8	9	6	2
46d	Rectum (not anus)	2,609	—	—	5	18	37	53	129	175	223	268	387	500	419	253	142
46e	Liver	767	2	—	2	10	9	20	25	34	48	90	123	128	132	85	59
	Gall bladder and ducts	608	—	—	—	1	4	5	25	37	56	82	110	125	98	38	27
46f	Pancreas	1,363	1	—	2	5	8	20	47	70	124	193	206	272	208	135	72
46g	Peritoneum, mesentery, others	234	5	1	4	5	6	10	16	21	30	26	34	41	16	11	8
46h	Other and unspecified digestive organs	6	—	—	—	—	—	—	—	—	—	1	2	—	2	1	—
	Total	18,547	9	1	22	121	227	348	665	1,065	1,494	2,126	2,824	3,521	3,137	1,964	1,023
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
47a	Larynx, trachea	287	—	—	1	5	8	4	13	26	49	35	55	39	27	22	3
47b	Lung, bronchus, pleura	1,847	1	2	4	32	47	89	116	161	239	273	357	256	156	82	32
	Mediastinum	98	1	—	5	3	3	6	3	9	13	11	16	12	8	7	1
	Other and unspecified respiratory organs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	2,232	2	2	10	40	58	99	132	196	301	319	428	307	191	111	36
48a	Cervix uteri	2,138	1	—	2	51	78	113	244	270	307	327	272	213	150	72	38
48b	Corpus uteri	523	—	—	—	2	4	16	25	48	82	75	103	72	47	31	18
	Other and undefined uterus	1,586	1	—	3	16	33	53	100	163	235	229	227	218	178	87	43
	Total	4,247	2	—	5	69	115	182	369	481	624	631	602	503	375	190	99
49	Ovary and Fallopian tube	2,361	1	5	17	44	67	166	276	312	348	316	300	246	162	75	26
	Vulva and vagina	411	—	1	—	8	1	9	14	29	27	47	70	71	68	37	29
	Other female genital organs	4	—	—	1	—	—	—	—	1	—	1	—	—	—	1	—
	Total	2,776	1	6	18	52	68	175	290	342	375	364	370	317	230	113	55
50	Breast	7,876	—	—	2	108	233	474	688	816	915	985	1,062	958	793	519	323
52	Kidney	384	28	6	1	2	8	10	20	26	26	55	58	57	52	28	7
	Bladder, urethra, ureter	701	3	—	—	—	9	6	22	37	65	80	114	130	123	76	36
	Total	1,085	31	6	1	2	17	16	42	63	91	135	172	187	175	104	43
53	Skin	465	—	1	3	22	10	20	18	22	31	23	50	54	70	66	75
54a	Glioma of brain and nervous system (2) ..	349	24	15	15	43	24	27	39	44	51	34	20	9	3	1	—
54b, c	Other cancer of brain and meninges ..	88	2	6	2	7	6	6	12	8	15	11	6	4	2	1	—
	Other cancer of other nervous system (3)	27	3	4	3	—	3	—	3	3	—	2	1	3	2	—	—
	Total	464	29	25	20	50	33	33	54	55	66	47	27	16	7	2	—
55a	Adrenal glands	46	12	5	5	2	2	2	5	3	2	1	2	4	—	1	—
55b, d : 1	Ethmoid, nose	86	—	1	2	3	1	2	4	7	10	7	8	17	13	9	2
	Other bone (not jaw)	386	10	12	21	17	6	19	23	30	31	51	62	43	31	21	9
55c	Thyroid gland	254	—	—	1	1	3	11	16	21	23	30	46	42	34	17	9
55d : 2	Other and unspecified (4)	899	12	5	13	30	27	38	66	73	102	114	135	122	87	49	26
	Total	1,671	34	23	42	53	39	72	114	134	168	203	253	228	165	97	46

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes glioma of eye.
(3) Includes retina, optic nerve, spinal cord, cauda equina, nerves and sympathetic system.
(4) Includes lymphatic glands, abdomen, eye (except as above), muscle, etc.

Trend of mortality from Cancer of All Sites.—The crude death rate from cancer per million living in England and Wales is shown in heavy type in Table LXXXV for the four-year period 1936–39 and for each year 1940 to 1949. It has been rising steadily in each sex ; but it does not follow that the risk to the individual of dying from cancer is becoming any greater. Table LXXXV also shows how the likelihood of death from cancer increases with age. At ages 55–64 the rate per million living was more than twice what it was at 45–54, and at 65–74 it was more than four times as much. Clearly, an increase in the proportion of older to younger people in the population over a period of years must of itself cause the crude death rate from cancer to rise, even though the actual incidence has remained unchanged. Such an alteration in the age composition of the population of England and Wales has, of course, been slowly taking place for some time. It is therefore necessary, in order to consider whether the risk of dying from cancer is any greater now than previously, to examine the death rate in each age group separately.

Table LXXXVIII.—Cancer of All Sites : Mortality by Sex and Age in 1931-35* and 1936-39 per cent. of that in 1921-30, and Mortality in each year 1940 to 1949 per cent. of that in 1936-39.

Age	Per cent. of rate in 1921–30		Per cent. of rate in 1936–39									
	1931–35	1936–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
	Males											
All Ages	**120**	**127**	**103**	**105**	**107**	**109**	**108**	**112**	**114**	**117**	**119**	**121**
Ages 0–64 E.A.D.R.	102	102	102	102	101	102	102	106	106	110	111	110
0–	118	144	100	124	86	104	76	98	86	129	100	122
5–	116	132	116	116	116	120	124	120	144	128	132	144
15–	100	126	93	86	91	95	103	93	102	116	102	110
25–	106	130	88	105	88	92	89	106	95	103	97	92
35–	109	116	105	108	108	107	108	110	112	117	111	106
45–	103	102	104	103	105	106	106	110	115	116	119	117
55–	101	99	101	101	100	100	100	104	103	107	109	109
65–	110	106	100	101	103	102	99	100	100	102	104	105
75 and over	115	116	103	99	96	99	94	95	99	101	102	105
	Females											
All Ages	**116**	**119**	**103**	**103**	**104**	**105**	**105**	**106**	**108**	**109**	**110**	**110**
Ages 0–64 E.A.D.R.	100	97	99	98	98	98	97	95	96	94	94	92
0–	116	129	100	93	103	83	118	115	115	135	120	153
5–	107	140	105	124	129	114	110	129	105	86	100	114
15–	115	129	95	86	95	105	89	89	86	95	102	98
25–	100	105	102	109	105	108	102	102	99	99	96	100
35–	100	97	96	96	96	96	94	93	95	94	89	91
45–	100	97	100	100	98	97	97	94	96	94	94	91
55–	100	95	99	97	98	97	96	95	96	94	94	92
65–	103	96	101	97	98	96	94	95	96	95	94	94
75 and over	109	103	98	96	94	95	92	93	95	99	98	100

* The rates used for 1931–35 are first corrected to accord with the classification in use from 1940 onwards. The rates used for 1936–49 are those in Table LXXXV.

Table LXXXV accordingly gives the age-specific death rates over the last ten years. (These rates are based on total populations inclusive of armed forces at home and abroad and are not, therefore, influenced by civilian selection.

Deaths from cancer which occur abroad among armed forces are omitted, but may be regarded as negligible.) Expressing the rates for succeeding years as percentages of the rates in 1936–39, as in Table LXXXVIII, the following conclusions emerge :—

(*a*) As the decade drew to its close, cancer was being certified more frequently as a cause of death among children of both sexes. Among boys of school age, and girls under the age of five, the rates for 1948–49 were more than a third greater than in 1936–39. It should be remembered, however, that cancer is *relatively* unimportant at this age period, accounting for only about 5 per cent. of deaths from all causes between ages 1 and 14, and less than 0·5 per cent. of deaths from cancer at all ages.

(*b*) Among adult women, cancer mortality at ages 35–74, which covers about three-quarters of the total female cancer mortality, has been showing a definite downward trend. This continued in 1948 and 1949 consolidating a decline which, for women aged 35–64, has been hardly interrupted since 1900. The rates for young women under 35, however, and for elderly women of 75 and over, have been more irregular. 1948–49 brought no improvement over pre-war years in these age groups.

(*c*) Among adult men, in marked contrast to the experience of women, cancer mortality rates were higher in 1948–49 than before the war at all ages except 25–34. Three important provisos must, however, be made to this statement : firstly, the rate was fairly steady among men aged 55–64 until 1945, and among men aged 65–74 until 1948 ; secondly, the certified mortality from cancer was decreasing among elderly men, 75 or over, from 1940 to 1945 ; and lastly, in the case of younger men aged 35–44, a rising trend was reversed in 1948, the rate for 1948–49 being 2 per cent. less than that for the previous two years.

The Equivalent Average Death Rate for ages 0–64 is shown in Table LXXXV as a convenient way of summarising mortality experience under 65 independently of the age distribution in the population. For males under 65, the E.A.D.R. for 1948–49 was 10 per cent above that for 1936–39, whereas for females under 65 it had fallen during the same period by 7 per cent.

The Comparative Mortality Index, although allowing for the effects of the progressive change in the age structure of the population, is based on the civilian population alone and may be influenced by civilian selection during the war. The values of the C.M.I. for cancer from 1938 to 1949 were as follows :—

Year	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Males ..	1·000	0·983	1·010	1·013	1·012	1·022	1·006	1·024	1·018	1·047	1·057	1·063
Females ..	1·000	0·984	0·985	0·969	0·964	0·961	0·941	0·937	0·949	0·949	0·941	0·937

A long-term trend of cancer mortality, rising among males and declining among females, is apparent, though there are some marked fluctuations between individual years.

Table LXXXIX.—Cancer of All Sites (excluding Lung, Bronchus and Pleura): Death rates per million living* by Sex and Age in 1936-39 and each year 1940 to 1949.

	1936–39 †	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
	Males										
All Ages	**1,444**	**1,461**	**1,475**	**1,475**	**1,483**	**1,458**	**1,501**	**1,493**	**1,505**	**1,504**	**1,493**
Ages 0–64 E.A.D.R.	894	895	883	857	844	825	850	822	821	811	783
0–	42	48	61	41	51	36	48	42	62	49	59
5–	20	28	28	29	30	31	29	36	32	32	36
15–	49	51	47	50	50	57	50	54	61	54	56
25–	118	109	126	107	107	105	127	116	124	108	110
35–	351	372	385	372	373	367	373	365	374	358	341
45–	1,256	1,297	1,265	1,262	1,240	1,196	1,236	1,235	1,173	1,190	1,147
55–	3,995	3,954	3,857	3,727	3,661	3,591	3,687	3,514	3,543	3,502	3,371
65–	9,246	9,073	9,149	9,185	8,957	8,674	8,655	8,494	8,536	8,504	8,354
75 and over	14,310	14,271	13,858	13,312	13,625	12,968	13,013	13,476	13,734	13,710	14,054
	Females										
All Ages	**1,559**	**1,596**	**1,595**	**1,612**	**1,634**	**1,619**	**1,637**	**1,668**	**1,677**	**1,680**	**1,688**
Ages 0–64 E.A.D.R.	1,006	1,016	1,009	1,007	1,000	987	966	976	954	945	926
0–	34	40	37	39	32	47	46	46	54	47	60
5–	17	21	26	27	22	23	26	22	17	20	23
15–	38	39	38	40	43	38	38	35	41	43	41
25–	148	156	166	162	164	157	154	151	147	144	151
35–	665	665	669	663	658	643	640	651	645	606	613
45–	1,901	1,950	1,943	1,905	1,887	1,875	1,821	1,852	1,804	1,781	1,746
55–	3,751	3,752	3,699	3,729	3,711	3,653	3,579	3,611	3,517	3,523	3,415
65–	6,967	6,866	6,639	6,654	6,553	6,389	6,406	6,459	6,390	6,306	6,292
75 and over	11,380	10,537	10,382	10,099	10,234	9,825	9,965	10,203	10,614	10,468	10,627

* Including deaths of non-civilians in England and Wales, and based upon mid-year populations in 1936–39 and total populations inclusive of Armed Forces at home and abroad in 1940–49.

† Rates for 1936–39 accord with the classification in use from 1940 onwards, the deaths being those regarded by the certifier as caused by cancer, defined as in the Fifth Revision of the International List.

The contrast between the male and the female death rate trends is almost entirely due to the recent massive increase in mortality among males certified as due to cancer of the lung and bronchus. In 1936–39 bronchogenic carcinoma accounted for about a sixth of cancer deaths among males between the ages of 35–64. The proportion had by 1949 risen to about a third. Table LXXXIX gives the age-specific rates for cancer of all sites after those for cancer of the lung and bronchus have been subtracted. A particularly interesting and striking picture emerges when the resulting rates for the years 1945–49 are expressed as percentages of the rates in 1936–39.

		0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
1945–49 per cent. of 1936–39.	Males	112	103	95	88	92	95
	Females	106	95	95	94	91	91

Clearly, there has been a decline in the risk of death from cancer other than that arising in the lung since 1935–36 among males at all ages over 45 and females over 35, and a very slight upward trend among males between 35 and 45. The decline in mortality classed to sites other than lung for those between 55 and 65 has actually been greater among men than women, amounting to

12 per cent as against 6 per cent. Much of this male advantage has been gained at " accessible " sites, such as lip, tongue, mouth and jaw. The male rates for cancer of these sites were still considerably higher than the female, but the sex difference had become less pronounced than formerly.

Trends of mortality from Cancer at different Sites.—In the last twenty years exploratory laparotomy and diagnostic methods such as radiography, cystoscopy and bronchoscopy have been employed more widely. With the chances of wrongly diagnosing what is really cancer thus reduced, an increase in the incidence of certified mortality from cancer might normally be expected, particularly at older ages, and among young children. A major part of the increase in the specific death rates from cancer between 1901 and 1935 was undoubtedly due to improved diagnosis. It is therefore tempting to attribute the improvement in overall mortality in recent years from cancer other than lung to more effective treatment by radical surgery and radiotherapy.

Cancer is the end result of a breakdown or alteration in normal cellular metabolism or nutrition which produces a change in the manner of growth. The responsible ætiological factors may be dissimilar, and may behave quite differently for the different organs. Before an increase or decrease in national mortality rates can be associated with the efficacy or otherwise of treatment, there must be a greater understanding of the ecology of cancer. For example, it is known that certain forms of skin cancer are promoted by external irritants such as hydrocarbon oils, and the marked regional and social class differences in mortality from stomach cancer have suggested to some the ætiological importance of factors such as dietary habits. Cancer of the uterine cervix is positively associated with the fact of a birth or a miscarriage having taken place, and cancer of the breast is relatively more common among middle-aged and elderly spinsters.

The incidence of cancer at one particular site may therefore increase while that at another is decreasing, these differences being due to independent alterations in environmental or biological factors. A relatively level mortality trend such as that for cancer of the breast, for example, might be accounted for by the interaction of increasing incidence with increasing benefit from earlier and more effective treatment.

Table XC shows certain age-specific mortality rates during groups of years from 1911 to the present time for a number of leading sites. Rates have been increasing at some sites, but decreasing at others. The general pattern of the more obvious trends may be summarised as follows :—

(*a*) Among males, the sites showing an *increase* in the rate of cancer mortality *at all ages* since 1936–39 have been : lung and bronchus, bladder and kidney, pancreas. *Decreases* have been in progress *at all ages* for the following sites : lip, tongue, mouth and tonsil, jaw, œsophagus, liver, penis, mediastinum, larynx, trachea ; at ages over 45 for skin and at ages over 55 for pharynx.

(*b*) Among females, the reported mortality has been *rising at all ages* from cancer of the lung and bronchus, and of the ovary ; among those aged 55 and over from cancer at the following sites : bladder and kidney, pancreas, peritoneum and mesentery. As with males, there have been *decreases at all ages* from cancer of the lip, mouth and tonsil, jaw, and liver, but only at ages under 65 from cancer of the œsophagus. There have been fewer women under 75 dying from cancer of the uterus, but comparatively little improvement is evident in the mortality from breast cancer. The mortality trend for skin cancer has been steady at ages under 65 but going down in the older age groups.

Table XC.—Cancer of Different Sites: Death Rates per million living* by Sex and Age. 1911-20, 1921-30, 1931-35, 1936-39, 1940-44, 1945-49, 1948 and 1949.

Period	MALES						FEMALES					
	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
All Sites												
1911–20 ..	57	424	1,665	4,333	7,691	9,208	64	787	2,222	4,257	6,786	8,512
1921–30 ..	60	420	1,618	4,666	9,063	11,994	67	762	2,115	4,172	7,220	10,236
1931–35 ..	62	446	1,618	4,601	9,760	13,486	68	732	2,048	4,010	7,167	10,978
1936–39 ..	67	452	1,590	4,583	9,783	14,716	65	693	1,973	3,905	7,080	11,369
1940–44 ..	69	503	1,705	4,620	9,802	14,078	73	687	1,984	3,849	6,820	10,385
1945–49 ..	75	522	1,874	4,899	9,922	14,415	71	664	1,889	3,714	6,657	10,642
1948 ..	74	521	1,928	5,022	10,093	14,588	69	640	1,890	3,715	6,617	10,741
1949 ..	75	498	1,894	5,008	10,197	15,078	74	653	1,836	3,620	6,630	10,916
Lips												
1911–20 ..	0	2	10	38	108	335	0	0	1	2	5	21
1921–30 ..	0	1	7	36	104	297	0	0	1	2	6	19
1931–35 ..	0	1	7	27	90	281	0	0	0	1	5	15
1936–39 ..	0	1	4	21	74	250	—	0	0	1	4	19
1940–44 ..	0	1	3	16	65	194	—	0	0	2	4	15
1945–49 ..	0	0	2	9	42	149	0	—	0	2	2	11
1948 ..	—	—	3	5	37	122	—	—	—	1	1	10
1949 ..	—	1	3	6	35	152	—	—	—	—	2	15
Tongue												
1911–20 ..	0	19	122	279	395	382	0	4	9	18	30	47
1921–30 ..	0	9	81	266	411	429	0	2	7	17	29	51
1931–35 ..	0	4	40	195	399	439	0	2	5	17	27	52
1936–39 ..	0	3	26	140	324	450	0	1	7	15	33	43
1940–44 ..	0	2	17	91	294	404	0	2	5	16	30	55
1945–49 ..	0	2	11	50	196	343	0	1	6	11	26	51
1948 ..	0	1	9	51	184	339	0	1	6	10	27	46
1949 ..	0	1	8	37	163	289	0	1	5	13	26	60
Mouth and Tonsil(1)												
1911–20 ..	1	9	52	127	179	204	0	2	6	13	20	37
1921–30 ..	1	7	48	158	255	280	0	2	6	16	27	41
1931–35 ..	1	4	30	144	290	362	0	3	6	15	23	51
1936–39 ..	1	4	23	109	269	373	0	2	5	12	29	51
1940–44 ..	1	3	15	68	219	374	0	2	5	12	25	46
1945–49 ..	0	2	9	33	125	237	0	1	3	8	17	36
1948 ..	0	2	9	33	101	197	0	1	4	6	13	33
1949 ..	0	2	5	25	87	208	0	1	1	7	17	28
Pharynx												
1911–20 ..	1	4	25	60	83	74	0	4	8	14	11	17
1921–30 ..	1	4	22	69	113	103	0	4	8	12	16	21
1931–35 ..	1	3	19	71	138	134	0	2	9	15	20	22
1936–39 ..	1	3	12	57	139	159	0	2	9	17	23	19
1940–44 ..	1	4	13	44	115	158	1	3	7	14	22	22
1945–49 ..	1	3	11	34	96	145	1	2	7	14	21	26
1948 ..	1	4	9	26	85	144	1	1	6	13	22	21
1949 ..	1	3	12	28	93	145	1	3	9	16	24	29
Jaw												
1911–20 ..	1	10	52	126	206	231	1	6	15	31	48	64
1921–30 ..	2	6	33	105	178	243	1	4	13	27	45	66
1931–35 ..	1	5	19	65	149	205	1	3	8	21	39	55
1936–39 ..	1	4	16	53	115	186	1	3	9	19	41	64
1940–44 ..	1	2	9	35	97	161	0	2	5	12	26	41
1945–49 ..	1	2	6	17	60	114	0	1	4	8	17	35
1948 ..	0	2	7	15	50	103	0	1	6	6	17	22
1949 ..	1	1	5	12	50	106	0	1	3	8	13	30

Table XC—*continued.*

Period	MALES						FEMALES					
	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
Œsophagus												
1911–20 ..	0	18	139	357	510	466	1	18	43	70	105	144
1921–30 ..	0	10	113	384	600	623	1	13	45	81	133	190
1931–35 ..	0	9	71	341	639	737	0	9	42	93	153	226
1936–39 ..	1	10	50	264	591	758	1	9	37	91	159	242
1940–44 ..	1	9	41	205	557	715	0	7	30	79	152	227
1945–49 ..	1	8	40	160	463	724	0	7	29	77	157	253
1948 ..	1	7	39	157	458	734	1	7	26	79	154	255
1949 ..	1	6	35	152	430	701	0	8	23	70	151	253
Stomach and Duodenum												
1911–20 ..	6	96	361	952	1,709	1,686	4	74	255	663	1,268	1,457
1921–30 ..	7	114	407	1,067	2,040	2,311	5	73	253	681	1,489	1,952
1931–35 ..	7	116	425	1,076	2,193	2,624	6	71	233	645	1,513	2,212
1936–39 ..	7	113	422	1,087	2,160	2,755	5	69	219	610	1,451	2,264
1940–44 ..	6	112	406	1,062	2,088	2,620	6	62	206	580	1,321	2,027
1945–49 ..	6	106	383	1,060	2,107	2,684	4	61	180	517	1,277	2,110
1948 ..	6	106	383	1,095	2,170	2,755	5	58	167	506	1,254	2,199
1949 ..	6	97	360	1,035	2,152	2,809	4	53	170	465	1,233	2,158
Intestine except Rectum and Duodenum(2)												
1911–20 ..	4	44	145	423	901	1,154	4	50	179	469	982	1,358
1921–30 ..	4	44	153	508	1,237	1,840	4	51	180	506	1,198	2,006
1931–35 ..	5	44	160	520	1,384	2,248	5	59	185	498	1,266	2,398
1936–39 ..	5	48	155	543	1,431	2,495	6	62	193	501	1,237	2,502
1940–44 ..	5	50	156	526	1,422	2,409	6	59	192	493	1,202	2,361
1945–49 ..	6	49	152	467	1,346	2,430	5	60	188	468	1,114	2,332
1948 ..	6	46	147	432	1,294	2,440	5	49	186	457	1,066	2,292
1949 ..	4	49	148	422	1,246	2,377	4	56	184	460	1,048	2,329
Rectum(3)												
1911–20 ..	4	37	142	445	895	1,113	3	36	111	260	509	647
1921–30 ..	4	31	143	483	1,057	1,421	4	32	98	253	513	778
1931–35 ..	4	35	135	481	1,165	1,570	4	31	87	239	511	791
1936–39 ..	4	33	121	478	1,170	1,736	3	32	93	225	493	784
1940–44 ..	4	38	126	457	1,215	1,741	4	33	98	231	502	812
1945–49 ..	3	35	118	414	1,146	1,798	3	28	93	218	481	850
1948 ..	3	36	118	402	1,165	1,784	3	27	87	221	466	870
1949 ..	3	29	105	366	1,096	1,846	2	26	100	197	488	873
Liver												
1911–20 ..	3	33	144	420	822	987	3	38	160	472	920	1,104
1921–30 ..	2	19	85	264	609	859	2	20	82	256	595	896
1931–35 ..	2	16	55	180	449	654	1	13	49	140	365	611
1936–39 ..	1	11	51	144	334	538	1	13	39	112	269	495
1940–44 ..	1	12	45	129	302	460	1	11	35	99	228	410
1945–49 ..	1	8	38	106	244	365	1	8	24	72	169	319
1948 ..	1	9	35	101	208	362	1	7	26	68	161	297
1949 ..	1	6	31	85	199	328	1	8	19	55	138	296
Gall Bladder and Ducts												
1911–20 ..	0	2	10	26	59	83	0	3	19	58	113	132
1921–30 ..	0	3	10	34	90	155	0	4	22	75	166	243
1931–35 ..	0	2	11	40	95	174	0	4	21	72	176	260
1936–39 ..	0	2	12	35	91	165	0	3	19	69	146	233
1940–44 ..	0	2	10	33	84	146	0	4	18	56	134	195
1945–49 ..	0	3	11	34	78	113	0	3	19	53	119	175
1948 ..	0	2	9	31	79	120	0	2	19	52	116	173
1949 ..	—	3	12	36	71	130	0	3	20	55	129	175

Table XC—*continued.*

Period	MALES						FEMALES					
	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
Pancreas												
1911–20 ..	1	10	36	88	128	127	1	7	26	68	109	111
1921–30 ..	1	15	53	132	223	253	1	9	34	100	170	214
1931–35 ..	1	14	62	148	300	381	1	10	38	113	224	290
1936–39 ..	1	14	61	163	324	475	1	8	42	120	244	362
1940–44 ..	1	15	63	167	337	487	1	9	36	114	240	323
1945–49 ..	1	15	65	181	367	540	1	10	38	118	261	405
1948 ..	1	15	65	181	359	623	1	8	40	126	255	435
1949 ..	0	14	68	201	395	554	1	8	38	127	263	445
Peritoneum, Mesentery(4)												
1911–20 ..	1	5	12	26	42	37	1	10	28	57	83	100
1921–30 ..	2	6	10	22	31	29	1	7	19	39	51	53
1931–35 ..	2	5	10	16	22	20	1	5	14	26	37	30
1936–39 ..	2	5	7	15	23	24	1	5	11	26	30	28
1940–44 ..	2	6	10	20	30	23	2	5	13	23	36	32
1945–49 ..	2	5	11	10	19	23	1	5	12	23	38	31
1948 ..	2	4	8	17	20	38	2	5	15	25	38	34
1949 ..	2	5	8	24	22	27	1	4	12	22	40	36
Larynx, Trachea												
1911–20 ..	0	10	61	140	191	157	1	8	20	25	24	28
1921–30 ..	0	8	64	185	285	242	0	7	23	35	38	37
1931–35 ..	0	7	49	176	295	323	0	7	23	33	42	47
1936–39 ..	0	6	38	154	310	371	0	6	20	38	48	60
1940–44 ..	0	6	35	125	286	342	0	6	19	36	45	54
1945–49 ..	0	5	30	111	247	325	0	4	15	35	46	61
1948 ..	0	9	34	105	252	329	0	4	15	34	50	63
1949 ..	0	4	28	108	232	345	1	4	13	34	52	56
Lung, Bronchus, Pleura												
1911–20 ..	3	13	34	64	76	42	1	8	20	34	42	28
1921–30 ..	3	29	73	128	136	92	1	10	25	50	60	51
1931–35 ..	5	69	217	350	347	239	2	18	47	94	124	105
1936–39 ..	8	99	335	579	570	381	2	24	60	123	176	155
1940–44 ..	8	129	453	866	799	498	3	27	72	140	205	183
1945–49 ..	9	159	678	1,376	1,414	803	4	34	86	185	288	257
1948 ..	11	163	737	1,520	1,589	878	3	34	109	191	311	273
1949 ..	9	157	747	1,637	1,843	1,024	4	40	91	206	338	290
Mediastinum												
1911–20 ..	2	10	22	46	53	35	1	5	12	21	26	22
1921–30 ..	2	11	32	63	82	55	1	5	13	27	40	35
1931–35 ..	1	9	24	45	67	57	1	3	8	19	25	30
1936–39 ..	2	6	19	44	63	46	1	3	6	15	25	29
1940–44 ..	2	8	27	48	57	52	1	3	7	13	23	30
1945–49 ..	2	6	17	34	42	41	1	3	6	11	19	18
1948 ..	2	4	16	30	39	38	1	1	6	9	23	21
1949 ..	3	4	14	25	31	41	1	3	4	10	15	17
	Prostate						**Uterus**					
1911–20 ..	0	2	16	99	329	510	11	218	556	791	861	773
1921–30 ..	0	2	22	158	593	1,034	11	200	473	682	831	823
1931–35 ..	0	2	26	175	734	1,355	8	171	414	585	742	745
1936–39 ..	0	4	25	193	772	1,535	7	151	386	557	697	747
1940–44 ..	0	3	26	206	829	1,601	7	127	377	556	684	690
1945–49 ..	0	3	23	205	875	1,856	7	92	314	513	628	696
1948 ..	0	2	19	206	899	1,857	6	84	303	513	632	717
1949 ..	1	2	22	185	929	2,091	7	87	279	504	608	712

Table XC—*continued.*

Period	MALES						FEMALES					
	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
	Testis						**Ovary and Fallopian Tube**					
1911–20 ..	3	8	7	8	15	29	4	31	78	103	100	76
1921–30 ..	4	10	7	9	15	28	5	43	112	156	170	133
1931–35 ..	4	12	10	8	15	23	6	53	143	194	220	179
1936–39 ..	5	12	7	10	18	24	7	60	158	222	253	244
1940–44 ..	5	13	11	8	17	19	7	63	171	240	262	228
1945–49 ..	7	14	11	9	11	21	6	65	181	260	288	259
1948 ..	6	14	12	14	12	17	6	65	185	255	303	255
1949 ..	8	16	9	5	12	14	6	68	193	267	301	282
	Penis						**Vagina, Vulva**(5)					
1911–20 ..	0	3	9	29	51	108	1	6	20	49	100	174
1921–30 ..	0	2	9	22	58	118	0	6	19	49	104	189
1931–35 ..	0	3	9	21	52	126	0	5	19	43	111	206
1936–39 ..	0	1	6	20	48	134	0	5	16	41	107	204
1940–44 ..	0	2	7	15	45	108	1	6	15	43	101	185
1945–49 ..	0	1	5	12	33	77	1	4	14	34	81	157
1948 ..	0	1	3	10	28	77	0	4	10	37	80	167
1949 ..	0	1	3	9	28	93	1	3	14	30	78	144
	Breast											
1911–20 ..	0	1	3	6	12	25	6	176	474	696	946	1,503
1921–30 ..	0	1	3	8	14	27	7	187	508	782	1,052	1,740
1931–35 ..	0	1	3	9	17	33	8	189	529	839	1,098	1,849
1936–39 ..	0	1	4	8	16	35	8	184	516	830	1,132	1,889
1940–44 ..	0	1	4	8	19	28	9	201	533	823	1,114	1,612
1945–49 ..	0	1	3	8	19	31	9	210	511	794	1,095	1,683
1948 ..	—	1	1	5	25	26	9	211	514	804	1,082	1,712
1949 ..	0	1	3	11	18	32	10	206	493	763	1,112	1,754
	Kidney											
1931–35 ..	4	10	25	56	72	71	3	5	16	35	58	60
1936–39 ..	4	11	28	56	76	66	3	5	15	31	56	65
1940–44 ..	4	8	29	61	82	65	3	6	15	33	56	65
1945–49 ..	4	9	32	72	101	86	4	6	15	34	58	71
1948 ..	4	9	35	80	107	90	4	8	15	40	64	56
1949 ..	4	10	39	71	122	93	3	5	15	33	63	93
	Bladder, Ureter, Urethra											
1911–20 ..	1	8	36	124	297	385	0	4	15	43	91	133
1921–30 ..	1	8	38	132	309	467	0	4	17	48	108	173
1931–35 ..	0	9	47	139	332	523	0	4	14	44	111	190
1936–39 ..	1	8	45	146	329	542	0	4	15	52	118	185
1940–44 ..	1	10	55	169	367	582	0	5	20	55	124	225
1945–49 ..	1	11	56	182	402	653	0	4	19	56	137	249
1948 ..	0	11	56	189	424	682	—	4	19	58	145	262
1949 ..	0	9	56	195	432	752	0	4	19	58	134	252
	Skin(6)											
1911–20 ..	1	9	29	79	187	643	1	5	15	42	111	371
1921–30 ..	1	8	26	82	210	705	1	7	13	36	102	388
1931–35 ..	1	7	22	64	201	674	1	5	13	32	84	379
1936–39 ..	1	6	20	56	177	662	1	6	15	27	76	329
1940–44 ..	1	7	21	55	161	527	2	6	13	29	70	268
1945–49 ..	2	8	18	47	128	415	2	7	12	25	61	234
1948 ..	2	9	18	44	113	419	2	6	12	22	58	215
1949 ..	1	5	16	40	118	395	2	9	13	22	57	226

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Table XC—*continued.*

Period	MALES						FEMALES					
	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over	0–34 E.A.D.R.	35–	45–	55–	65–	75 and over
Brain and Central Nervous System												
1931–35 ..	9	25	37	32	15	8	9	14	25	23	11	9
1936–39 ..	10	25	48	46	16	10	8	20	26	26	13	7
1940–44 ..	10	28	49	45	21	6	8	16	27	24	14	8
1945–49 ..	12	32	58	67	29	9	10	20	34	33	19	10
1948 ..	13	31	69	70	34	3	9	20	35	29	20	11
1949 ..	14	34	65	86	36	12	11	19	36	45	24	10
Bones (except Jaw)												
1911–20 ..	7	12	25	52	77	89	5	8	22	39	57	82
1921–30 ..	8	13	27	56	83	109	6	11	23	40	66	86
1931–35 ..	8	11	32	52	82	84	6	11	23	37	61	68
1936–39 ..	9	14	29	57	89	114	6	11	21	42	60	79
1940–44 ..	8	13	32	61	99	111	6	10	22	40	68	84
1945–49 ..	7	10	29	59	87	112	6	8	21	39	61	83
1948 ..	7	9	24	53	88	96	5	9	19	39	59	85
1949 ..	7	9	25	58	89	125	6	8	20	39	70	88
Thyroid Gland												
1911–20 ..	0	1	4	9	12	12	0	3	9	20	34	33
1921–30 ..	0	1	5	12	14	18	0	3	9	23	42	58
1931–35 ..	0	1	5	12	20	16	0	3	11	24	44	54
1936–39 ..	0	1	5	11	17	18	0	3	10	24	44	59
1940–44 ..	0	2	5	11	20	23	0	3	10	25	40	59
1945–49 ..	0	2	4	9	20	26	0	3	10	25	46	57
1948 ..	0	1	4	11	20	19	0	3	9	26	47	49
1949 ..	0	1	3	10	19	35	0	4	12	21	48	64
Other Sites												
1931–35 ..	6	22	68	158	198	125	5	32	66	113	77	44
1936–39 ..	3	7	21	94	237	414	3	2	26	59	116	211
1940–44 ..	7	17	37	89	175	224	5	9	33	61	92	128
1945–49 ..	8	25	55	124	228	297	6	18	46	82	131	174
1948 ..	8	23	58	138	251	296	6	19	51	85	151	168
1949 ..	8	27	62	138	251	355	8	21	53	94	154	198

* Including deaths of non-civilians in England and Wales, and based upon mid-year populations in 1911–14 and 1921–39 and total population inclusive of Armed Forces at home and abroad in 1915–20 and 1940–49.

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes small intestine, cæcum, flexures, large and undefined intestine.
(3) Includes anus in 1911–30.
(4) Includes omentum.
(5) Includes other female genital organs.
(6) Includes scrotum, also anus from 1931.

Some of these changes are due to better certification following improved methods of diagnosis and consist in the transfer of deaths from one site to another. Primary cancer of the liver is rare in England and Wales, and the recorded decrease in both sexes is mainly fictitious. What was previously termed cancer of the liver is now, in consequence of better diagnosis, seen to be the secondary manifestation of cancer at some other site. The increase in cancer of the pancreas in both sexes is largely due to such a shift, and it is likely that part, at least, of the increase in ovarian cancer among women may be similarly explained. The rise in the mortality rate from cancer of the bladder is, however, less easily attributed merely to more accurate diagnosis and certification.

In both sexes there has been an increase at all ages in mortality ascribed to malignant tumours of the brain and central nervous system. This has to some extent been due to more accurate diagnosis, for tumours of uncertain nature are excluded from the group of malignant cancers, and proportionately more of these may be now identified as malignant.

47b. Cancer of the Lung.—Argument continues as to whether the marked increase in mortality certified as due to cancer of the lung can be wholly attributed to improved methods of diagnosis. It is widely recognised that the accurate diagnosis of lung cancer is perhaps more dependent on radiography than the diagnosis of other internal cancers, such as those of the gastro-intestinal tract.

Unless a real increase in mortality is conceded, it follows that many deaths which are now being attributed to lung cancer must have been certified in previous years as deaths from other diseases, more particularly those affecting the respiratory tract. The following table lists conditions with which the signs and symptoms of lung cancer can be confused, and to which it may formerly have been certified.

Respiratory diseases to which lung cancer may have been wrongly attributed	Sites where secondary deposits from lung cancer may have been certified as primary growths
Respiratory tuberculosis	Liver
Bronchiectasis	Brain and spinal cord
Lung abscess	Bones of arm and leg
Pulmonary fibrosis	Spinal column
Pleurisy with effusion	Kidneys, suprarenal glands
Chronic bronchitis	Œsophagus
Bronchopneumonia	Mediastinum
Pneumonia	Lymph nodes

The list emphasises how difficult it is to balance the recorded increase against deficiencies in other items on the bill of mortality. Respiratory tuberculosis, the pneumonias, and chronic bronchitis have mortality rates comparable with those for cancer of the lung, but each of these three conditions has been subject in recent years to important factors operating independently of any which might affect mortality from cancer. The marked effect on pneumonia rates of the introduction of sulphonamides and the changing views of practitioners on what is meant by " bronchitis " can be cited as examples. Clearly, little or no purpose can be served by attempting to equate decreases with increases.

The primary cancer in the bronchus is not infrequently " silent ", and accurate diagnosis may be difficult. A true increase in incidence might therefore lead to a rise in the certified mortality from cancer of sites particularly favoured by metastatic deposits from the lung, such as the brain, the adrenal glands, bones and the liver. An increase due *entirely* to improvements in diagnosis, on the other hand, might be accompanied by a decrease in the certified mortality for these sites, assuming that some of it was really from tumours secondary to cancer of the lung. But with the exception of liver, where there is a marked decline, the rates show proportionately little change, or a slight upward trend, especially for malignant tumours of the brain and central nervous system (page 168).

The sex ratio in cancer mortality has been slowly altering, and in each age group the proportion of males to females certified as dying from cancer has been increasing. It can be shown that this is mainly due to lung cancer, from

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which five males die for every female. The ratio of the male to the female cancer mortality rate at different ages during 1936–39 and during 1945–49 were as follows :—

Period	*35–*	*45–*	*55–*	*65–*	*75 and over*
1936–39	0·65	0·81	1·17	1·38	1·29
1945–49	0·79	0·99	1·32	1·49	1·35

When the ratios are calculated after cancer of the lung and bronchus has been excluded, the picture has remained almost the same as it was ten years ago. In the age group 55–64, the ratio has actually changed to the advantage of the men.

Period	*35–*	*45–*	*55 –*	*65–*	*75 and over*
1936–39	0·53	0·66	1·06	1·33	1·28
1945–49	0·58	0·66	1·00	1·34	1·31

It can also be argued that the results of improved diagnosis should be equally evident in the two sexes, producing similar rates of increase. The following table shows that the increase in the ratio of male to female deaths from this cause has been decidedly more marked at some age groups.

Period	Male/Female ratio				
	35–	45–	55–	65–	75 and over
1911–20	1·6	1·7	1·9	1·8	1·5
1921–30	2·9	2·9	2·6	2·3	1·8
1931–35	3·8	4·6	3·7	2·8	2·3
1936–39	4·1	5·6	4·7	3·2	2·5
1940–44	4·8	6·3	6·2	3·9	2·7
1945–49	4·7	7·9	7·4	4·9	3·1

Between 1911 and 1920 the male death rate at ages 45–64 was almost twice the female rate, but by 1949 nearly eight males were dying for every female at these ages. This is consistent with a real increase, the responsible factor affecting the one sex more than the other.

It is pertinent to record that a Male/Female ratio of 8 to 1 is much greater than at any age for respiratory tuberculosis, broncho-pneumonia, or chronic bronchitis.

The importance of age-specific rates in the study of cancer mortality at different sites is excellently illustrated by the statistics for cancer of the lung presented in Table XC. It is apparent that since 1935 there has been a perceptible slackening of the rate of increase in mortality from cancer of the lung among men aged 35–44. This deceleration continued during the war years. Since 1947, mortality from cancer of the lung among men aged 35–44 has been unusually steady, and in fact slight decreases were registered in 1948 and 1949. A decelerating trend, though of lesser degree, has also become apparent among those aged 45–64. The increment shown by the 1946 rate over that of the previous year was 15 per cent. ; in 1947, 1948, and 1949 increments were successively 10, 5 and 1 per cent. In the senior age groups, however, there has been no apparent levelling of the upward trend, so that the probability of dying from cancer of the lung has continued to increase for men aged 55 and over at much the same rate as in previous years.

The position since 1945 may be summarised so far as males are concerned, in the following table. The rates for women show a much more irregular pattern, but the numbers involved at the younger ages are smaller.

Year	Percentage increase shown annually by the male mortality rate for cancer of the lung				
	35–	45–	55–	65–	75 and over
1946	+ 11	+ 15	+ 10	+ 13	+ 23
1947	+ 8	+ 10	+ 12	+ 18	+ 14
1948	− 6	+ 5	+ 10	+ 14	+ 9
1949	− 4	+ 1	+ 8	+ 16	+ 17

These trends at younger ages may be due to chance, but they are definite enough to merit attention. During the war years, cancer deaths occurring overseas among men in the armed forces were not included in the total, thus tending to lower the rate slightly. Clearly, this factor will not have been operating to any extent in 1948 and 1949 at ages 35 and over. The argument that improved diagnosis has alone accounted for the observed increase in deaths from lung cancer might adequately account for the differential trends, for it is natural to expect the limit of improvement in diagnosis to be reached first in the younger age groups. But *downward* trends developing in the death rates at 35–44 and 45–54 over the next few years would be difficult to reconcile with this hypothesis, and might suggest that one of the ætiological factors responsible for cancer of the lung was playing a less active rôle.

Table XCI.—Cancer of All Sites : Death Rates per million living in each Region and class of Area by Sex in three Age groups, 1949.

Area	15–44		45–64		65 and over	
	Males	Females	Males	Females	Males	Females
England and Wales	**252**	**301**	**3,217**	**2,638**	**11,665**	**8,084**
Regional Summary :						
South East	248	299	3,240	2,591	12,170	8,110
Greater London	261	315	3,462	2,611	13,059	8,481
Remainder of South East ..	228	277	2,945	2,566	11,267	7,718
North	279	313	3,378	2,761	11,590	8,124
North I	249	295	3,223	3,048	11,340	8,265
North II	290	262	3,222	3,030	10,613	8,024
North III	282	335	3,240	2,587	11,766	8,509
North IV	285	317	3,543	2,713	11,800	7,894
Midland	237	290	3,082	2,533	11,523	7,865
Midland I	240	271	3,184	2,578	11,824	7,917
Midland II	233	328	2,890	2,448	10,975	7,764
East	234	266	2,793	2,351	10,725	8,148
South West	214	292	2,756	2,607	10,802	8,203
Wales	226	317	3,383	2,804	11,392	8,151
Wales I	238	303	3,440	2,757	11,059	7,889
Wales II	192	353	3,232	2,917	12,100	8,642
Density Summary :						
County boroughs*	283	300	3,545	2,771	12,245	8,142
Other urban districts* ..	244	299	3,158	2,657	11,328	7,960
Rural districts*	202	290	2,544	2,402	10,321	7,814

* Excluding Greater London.

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Regional distribution of Cancer Mortality Rates.—Table XCI shows the death rates in 1949 at three age periods from cancer of all sites in each region, and in each of the three density aggregates. The rates exclude deaths of non-civilian and are based on the mid-1949 estimated civilian populations.

The death rates from cancer are greater in the towns than they are in the country, particularly for males, and there are considerable variations in the rates as between different regions; these are most evident at younger ages and among males. Some of the regional differences are no doubt accounted for by varying proportions in the amount of urbanisation.

This differential distribution emphasises the importance of environmenta factors in producing differences in cancer mortality between the main socio-economic groups, between different occupations, and between single and married women. The interaction of these and other more specific differential factors are all reflected in regional and urban variations. Variation in the accuracy and quality of death certification must be included as one of the responsible factors which merits more study in this context than it has hitherto received.

Table XCII.—Cancer of Stomach and Duodenum : Death Rates per million living in each Region and class of Area by Sex in three Age groups, 1949.

Area	15–44		45–64		65 and over	
	Males	Females	Males	Females	Males	Females
England and Wales	**43**	**24**	**647**	**303**	**2,350**	**1,547**
Regional Summary :						
South East	36	18	549	253	2,200	1,399
Greater London	41	20	574	269	2,328	1,477
Remainder of South East	29	16	516	233	2,069	1,317
North	55	30	738	368	2,593	1,697
North I	73	36	785	509	2,830	1,991
North II	72	24	764	317	2,306	1,446
North III	41	37	723	328	2,418	1,667
North IV	53	24	725	355	2,673	1,678
Midland	41	24	652	279	2,108	1,459
Midland I	43	21	676	304	2,181	1,492
Midland II	36	29	607	231	1,975	1,395
East	34	26	493	276	1,862	1,444
South West	23	25	527	263	2,484	1,676
Wales	50	27	919	373	2,944	1,928
Wales I	58	20	926	376	2,612	1,808
Wales II	27	46	902	365	3,650	2,151
Density Summary :						
County boroughs*	50	29	708	329	2,395	1,593
Other urban districts*	45	21	695	312	2,404	1,597
Rural districts*	32	25	545	277	2,225	1,460

* Excluding Greater London.

To exemplify the regional differences, tables have been prepared for certain important sites showing the death rate per million living in each geographical region. Tables XCII and XCIII cite respectively the 1949 rates for stomach and duodenum and for the uterus and breast.

Table XCIII.—Cancer of Uterus and Breast (females) : Death Rates per million living in each Region and class of Area at three Age groups, 1949.

Area	UTERUS			BREAST		
	15–44	45–64	65 and over	15–44	45–64	65 and over
England and Wales	**39**	**380**	**644**	**85**	**614**	**1,380**
Regional Summary :						
South East	29	322	625	93	658	1,373
Greater London	28	310	651	95	647	1,409
Remainder of South East ..	31	338	597	90	671	1,335
North	47	459	688	81	570	1,267
North I	50	557	752	64	572	1,188
North II	52	598	759	66	665	1,229
North III	52	465	778	77	552	1,241
North IV	42	398	606	93	561	1,312
Midland	36	361	594	92	619	1,445
Midland I	33	357	581	85	628	1,522
Midland II	42	368	618	105	602	1,299
East	34	335	719	48	582	1,215
South West	44	341	626	77	591	1,346
Wales	59	425	638	76	624	1,118
Wales I	65	434	707	74	597	1,020
Wales II	46	406	509	78	688	1,302
Density Summary :						
County boroughs*	41	447	698	78	609	1,354
Other urban districts* ..	44	395	631	89	635	1,298
Rural districts*	37	316	575	80	547	1,270

* Excluding Greater London.

Proportionate distribution of Cancer Mortality by Region and Urbanisation.—Table XCIV continues the series of proportionate rate for certain sites expressed per 1,000 deaths from cancer of all sites. 1948 and 1949 are shown separately. Among its interesting features is the marked excess of mortality from cancer of the respiratory system (mostly lung, bronchus and pleura) associated with urbanisation, the proportion for Greater London being particularly high. A comparison of the 1949 figures with those for 1940–42, however, shows that the difference between the regions and between different levels of urbanisation are less than they were.

Table XCIV.—Deaths from Cancer of certain Sites per 1,000 for all Sites at certain Ages in Regions and different classes of Area. (Civilians) 1940-42, 1943-45, 1946-47, 1948 and 1949.

	England and Wales	Greater London	Remainder of South East	North	Midland	East	South West	Wales	County boroughs*	Other urban districts*	Rural districts*
Cancer of Mouth and Œsophagus											
Males, all ages											
1940–42	**117**	109	117	120	120	111	124	125	123	118	114
1943–45	**102**	96	101	105	104	99	112	103	107	100	104
1946–47	**88**	85	87	89	87	84	95	92	90	87	89
1948	**80**	73	77	85	83	78	86	81	86	79	82
1949	**75**	65	74	77	76	80	81	89	79	76	79
Females, all ages											
1940–42	**34**	31	32	34	31	36	37	53	35	33	37
1943–45	**35**	31	30	36	31	33	41	53	34	35	39
1946–47	**35**	27	33	35	29	43	42	60	34	36	41
1948	**33**	29	30	33	28	41	41	50	31	37	34
1949	**33**	28	30	35	28	36	42	53	33	34	37
Cancer of Stomach and Duodenum											
Males, 15–44											
1940–42	**190**	173	149	219	176	158	196	231	205	195	170
1943–45	**199**	170	149	226	213	184	160	244	202	225	183
1946–47	**178**	179	138	183	183	178	119	244	177	182	168
1948	**176**	185	122	197	152	165	76	291	187	170	149
1949	**172**	159	129	198	173	146	109	221	175	183	160
Males, 45–64											
1940–42	**238**	205	211	257	236	240	247	300	241	249	254
1943–45	**225**	187	200	240	231	227	244	287	233	237	235
1946–47	**214**	169	193	238	210	208	240	281	219	229	234
1948	**211**	175	191	227	217	231	220	258	215	224	226
1949	**201**	166	175	218	212	177	191	272	200	220	214
Males, 65 and over											
1940–42	**209**	181	196	222	196	207	221	286	208	218	221
1943–45	**200**	178	185	206	191	198	223	277	192	214	208
1946–47	**201**	171	193	214	189	191	212	275	198	208	222
1948	**205**	165	194	216	204	218	231	271	203	221	222
1949	**201**	178	184	224	183	174	230	258	196	212	216
Females, 15–44											
1940–42	**94**	92	69	104	99	62	99	104	97	98	82
1943–45	**92**	88	72	106	91	68	73	95	98	89	87
1946–47	**88**	88	71	96	95	59	65	103	93	84	87
1948	**90**	95	69	111	78	33	95	77	101	90	57
1949	**79**	63	57	95	82	99	86	85	98	69	86
Females, 45–64											
1940–42	**134**	117	112	150	130	122	123	188	144	135	137
1943–45	**129**	113	116	142	124	107	119	175	138	135	119
1946–47	**127**	106	104	143	132	102	115	172	139	127	127
1948	**118**	115	93	132	119	97	99	141	120	121	112
1949	**115**	103	91	133	110	117	101	133	119	118	115

* Excluding Greater London.

Table XCIV—*contd.*

	England and Wales	Greater London	Remainder of South East	North	Midland	East	South West	Wales	County boroughs*	Other urban districts*	Rural districts*
Cancer of Stomach and Duodenum—*contd.*											
Females, 65 and over											
1940–42	**197**	173	167	224	197	185	189	254	208	200	199
1943–45	**191**	173	173	205	186	190	179	258	196	194	195
1946–47	**197**	181	169	213	193	182	203	278	197	207	196
1948	**196**	176	164	219	193	197	174	273	207	197	199
1949	**191**	174	171	209	185	177	204	236	196	201	187
Cancer of Respiratory System											
Males, all ages											
1940–42	**156**	216	145	155	148	106	101	114	173	133	103
1943–45	**183**	249	169	181	171	131	127	143	199	159	126
1946–47	**215**	280	202	211	207	152	161	166	239	184	151
1948	**236**	296	226	231	233	171	189	200	253	216	175
1949	**249**	310	235	248	242	209	188	196	277	221	181
Females, all ages											
1940–42	**41**	51	37	43	37	35	33	38	42	37	36
1943–45	**45**	55	42	47	41	38	30	39	46	41	39
1946–47	**50**	61	50	50	46	41	36	40	52	43	46
1948	**55**	68	49	56	50	49	47	43	58	48	45
1949	**56**	68	52	53	57	43	46	54	58	50	48
Cancer of Breast											
Females, 15-44											
1940–42	**253**	274	277	227	254	266	281	241	235	253	267
1943–45	**265**	287	275	244	283	243	287	222	255	258	272
1946–47	**287**	290	316	275	278	291	291	289	272	293	298
1948	**292**	291	264	301	290	388	265	268	295	276	320
1949	**283**	301	324	260	316	180	264	239	261	298	275
Females, 45–64											
1940–42	**236**	261	261	217	239	225	248	197	218	240	236
1943–45	**231**	254	252	203	244	241	256	199	219	224	244
1946–47	**239**	262	251	219	245	245	265	195	225	235	245
1948	**238**	251	254	223	238	254	235	223	226	237	245
1949	**233**	248	261	207	244	247	227	223	220	239	228
Females, 65 and over											
1940–42	**158**	162	170	149	163	154	164	142	156	159	158
1943–45	**161**	162	172	151	169	150	174	147	156	168	156
1946–47	**162**	159	169	156	168	169	163	150	157	164	166
1948	**162**	167	182	146	167	148	178	146	149	169	164
1949	**165**	166	173	156	184	149	164	137	166	163	163

* Excluding Greater London.

Table XCIV—*contd.*

	England and Wales	Greater London	Remainder of South East	North	Midland	East	South West	Wales	County boroughs*	Other urban districts*	Rural districts*
Cancer of Uterus											
Females, 15–44											
1940–42	**174**	122	182	199	161	173	177	231	190	192	172
1943–45	**152**	130	144	156	149	197	168	190	153	166	152
1946–47	**137**	108	123	144	142	148	150	195	149	139	146
1948	**128**	103	141	130	126	83	156	197	145	124	135
1949	**129**	90	111	150	125	126	150	188	137	149	127
Females, 45–64											
1940–42	**165**	150	153	183	159	172	167	153	181	167	148
1943–45	**157**	137	147	175	152	164	154	165	175	159	144
1946–47	**148**	130	143	158	152	141	148	160	159	154	137
1948	**147**	126	142	157	140	168	163	153	158	149	142
1949	**144**	119	132	166	142	142	131	152	161	149	131
Females, 65 and over											
1940–42	**87**	84	90	87	88	80	91	82	88	90	81
1943–45	**85**	81	84	89	86	91	81	77	91	85	81
1946–47	**81**	81	87	79	85	76	79	72	84	81	77
1948	**83**	77	84	84	86	80	95	66	87	81	83
1949	**80**	77	77	85	76	88	76	78	86	79	74
Cancer of Other Sites											
Males, all ages											
1940–42	**509**	486	540	490	523	568	547	474	483	521	555
1943–45	**506**	474	542	494	520	564	535	477	486	519	555
1946–47	**494**	465	521	479	510	569	529	468	466	515	539
1948	**478**	462	509	465	480	532	506	453	455	486	524
1949	**477**	454	514	456	489	538	520	454	449	491	529
Females, all ages											
1940–42	**439**	449	462	419	447	468	445	399	427	437	452
1943–45	**447**	455	465	436	449	464	457	402	436	446	458
1946–47	**444**	457	463	433	444	464	445	385	438	441	444
1948	**445**	452	470	430	454	448	443	408	438	444	453
1949	**453**	467	473	438	446	479	461	418	440	446	472

* Excluding Greater London.

48, 49, 50. Cancer of Uterus, other female genital organs and Breast—Influence of Marriage and Fertility.—Death rates from these causes in 1948–49 amongst women classified by age and marital condition are given in Table XCV. Some of the factors responsible for differences between the mortality of single and married women were mentioned on page 151. It is possible that in some cases the presence of cancer or of pre-cancerous disease may have deterred a woman from marriage, but this selective influence was probably less strong in relation to cancer than in relation to such diseases as tuberculosis or chronic heart disease which tend to have an earlier age of onset; in any case it can have been of little importance at ages over 45 when marriage becomes relatively infrequent.

Table XCV.—Cancer of Uterus, Other Genital Organs and Breast: Annual average death rates per million women aged 15 and over, according to marital condition. 1948-49.

Age at Death	48. Uterus			49. Other genital organs			50. Breast		
	Single	Married	Widowed or Divorced	Single	Married	Widowed or Divorced	Single	Married	Widowed or Divorced
15–	*1*	*4*	*83*	*6*	*5*	*83*	*1*	*1*	—
25–	*13*	23	*33*	*19*	15	*20*	*21*	33	*65*
35–	68	85	*147*	97	65	*72*	236	200	278
45–	174	294	458	280	184	213	663	469	512
55–	333	518	602	356	278	300	935	738	806
65–	451	604	705	465	366	365	1,319	1,003	1,111
75 and over ..	567	625	787	564	353	414	2,044	1,423	1,764
All Ages 15 and over ..	**101**	**218**	**612**	**120**	**132**	**312**	**320**	**362**	**1,034**
E.A.R. 35–74 ..	257	375	478	300	223	238	788	603	677

Rates based on less than 50 deaths are shown in italics.

The death rates from cancer of the uterus were consistently higher amongst married than single women, and higher still amongst widowed and divorced. For cancer of other female genital organs (ovaries, fallopian tubes and others) single women gave the highest rates, and there was little or no difference between married women and the widowed and divorced. Death rates from cancer of the breast were highest amongst single women at ages 45 and over; at younger ages widowed and divorced women gave higher rates.

These differences in the death rates of the three groups of women might to some extent derive from the effects of having or not having borne children. Information as to whether or not women who have been married have or have not had children is obtained at death registration and these two classes of women are designated *fertile* and *infertile* respectively. Analyses of the proportions infertile amongst women dying from a number of selected causes have been given in the Text Volume for 1938–39 (page 216) and the Civil Text Volume for 1940–45 (page 135). Adopting a different approach to the same kind of material Table XCVI gives proportionate death rates from cancer of uterus, other female genital organs, and breast per 10,000 deaths from all causes amongst women classed as single, married infertile, and married fertile.

Table XCVI.—Cancer of Uterus, Other Genital Organs and Breast: Annual average proportionate death rates per 10,000 deaths from all causes. Women aged 15 and over according to whether single, married infertile, or married fertile. 1948-49.

Age at Death	48. Uterus			49. Other genital organs			50. Breast		
	Single	Married Infertile	Married Fertile	Single	Married Infertile	Married Fertile	Single	Married Infertile	Married Fertile
15–	5	*41*	*36*	*43*	*54*	*48*	*7*	—	*24*
25–	*55*	*83*	185	*85*	*145*	*86*	*91*	*134*	271
35–	196	315	414	281	404	271	684	925	956
45–	281	576	623	452	551	340	1,071	1,073	940
55–	267	426	457	285	371	216	749	776	613
65–	145	216	194	149	175	110	423	413	314
75 and over ..	55	*75*	90	55	49	51	199	261	185
All Ages 15 and over	**123**	**292**	**307**	**147**	**274**	**165**	**391**	**590**	**486**
E.A.R. 35–74 ..	222	383	422	292	375	234	732	797	706

Rates based on less than 50 deaths are shown in italics.

Proportionate rates are shown in Table XCVI because reliable population estimates of the number of women of each class at various ages are not at present available. The interpretation of proportionate rates when only one or two causes are specified requires particular care since differences in the rates for the selected causes may arise not from real differences in the mortality from these causes but from differences in some of the other causes about which no details have been given.

A factor influencing the apparent mortality experience of fertile and infertile women is physical selection for child-bearing, analogous to the physical selection for marriage already referred to ; the disease from which a woman died, or its prodromata, may have deterred or prevented her from having children. This selective factor may affect the proportionate rates in Table XCVI directly in relation to the selected types of cancer and indirectly by affecting death rates from causes not shown in the table. Thus if tuberculosis, a major cause of death of women of child-bearing ages, deters a woman from having a child, the proportionate death rate from tuberculosis will be higher to this extent amongst infertile than fertile women, and the proportionate death rate from other causes not so influenced will be correspondingly lower. This complex interplay of selective influences, however, though important at ages under 45, does not appreciably enter into the comparison of mortality amongst the different groups of women at older ages ; their fertility status would in most cases be determined long before the onset of their fatal illness.

The proportionate death rates for cancer of uterus were consistently higher amongst both groups of married women, infertile and fertile, than amongst single women of the same age ; and the rates for fertile married women were at most ages slightly higher than those of the infertile group. This latter difference arises from the special susceptibility of women who have borne children to develop cancer of the uterine cervix. Table XCVII, which compares the proportionate death rates from cancer of cervix, body of uterus, and other or unspecified parts of the uterus amongst infertile and fertile married women indicates a clear excess of mortality from cancer of cervix amongst the married women who have had one or more children, and a quite definite opposite tendency for other uterine cancer. As Table XCVI has indicated, however, the main difference in mortality from cancer of the uterus as a whole lies not between those who have or have not had children but between single and married women. There is a much wider difference between single and childless married women than between the latter group and married women who have borne children. Either the fact that a woman will ultimately die from cancer of the uterus makes her more likely to marry, which is quite improbable, or a married woman, whether she has had children or not, is more likely than a single woman to die from cancer of the uterus.

Table XCVI also shows that the proportionate death rates from cancer of other female genital organs tended to be higher amongst infertile than fertile married women, with single women occupying an intermediate position. Possibly pre-cancerous lesions predisposed to childlessness and to remaining single, or child-bearing may have protected against cancer of these sites ; neither possibility can be dismissed.

A peculiarity commented upon in the infertility analysis of the 1940–45 Text, Part II, Civil (page 136), was that the proportion of infertile amongst women dying from cancer of the breast was low compared with other causes of death at ages under 45 and high at ages 45 and over ; the conclusion drawn was that at younger ages child-bearing pre-disposes to cancer of the breast, or *vice versa*, but that at older ages women who had borne children were less

Table XCVII.—Cancer of Cervix and Body of Uterus, and of Uterus unclassified : Annual average proportionate death rates per 10,000 deaths from all causes. Married women according to whether infertile or fertile. 1948-49.

Age at Death	48a. Cervix		48b. (Pt.) Body of Uterus		48h. (Pt.) Other Uterus	
	Infertile	Fertile	Infertile	Fertile	Infertile	Fertile
15–	*14*	*12*	—	—	*27*	*24*
25–	*47*	127	—	*4*	*36*	*55*
35–	*168*	268	*21*	*17*	*126*	129
45–	301	370	*56*	31	219	222
55–	164	239	*57*	44	205	175
65–	*68*	85	*40*	19	108	90
75 and over ..	*26*	30	*9*	*12*	*40*	49
All Ages, 15 and over	**126**	**163**	**36**	**24**	**131**	**120**
E.A.R. 35–74 ..	175	241	44	28	165	154

Rates based on less than 50 deaths are shown in italics.

liable than childless women to die from cancer of the breast. The proportionate death rates in 1948–49 in Table XCVI confirm this earlier observation, the rates being higher amongst the fertile at ages up to 45, and higher amongst the infertile at older ages. At ages 25–44 the rates for single women were much lower than for the two classes of married women. At ages 45–74 rates for single and for childless married women were much alike. It would seem that marriage more than child-bearing, pre-disposes to cancer of the breast amongst women under 45 (or much less likely, that a tendency to breast cancer pre-disposes to marriage) ; but that at older ages single women and childless married women both have a greater susceptibility to cancer of the breast than women who have borne children.

54, 56d, 57d. Neoplasms of the Brain and Nervous System.—Table XCVIII brings together the deaths from all forms of neoplasm of the central nervous system in each year 1936 to 1949. The number of tumours of uncertain nature shows little tendency to decline. The last column of the table cites the crude rate per million living for each year. This has remained steady among females but has tended to increase very slightly among males. From Table XC the age-specific rates for *malignant* tumours of the brain and nervous system appear to have increased at all ages in both sexes. Some of this increase may be fictitious, due to the transfer of cases from the " uncertain " to the malignant group, but at present it does not seem that the whole increase can be explained in this way.

Table XCVIII.—Deaths classed to Neoplasms of the Brain and Nervous System, with distinction of those specified as Glioma and other, Malignant and Benign, and Mortality from all forms. 1936 to 1949.

	Number of deaths including non-civilians(1)										Rates per million living at all ages(3)	
	Glioma(2) (except "benign") No. 54a		Sarcoma, other and undefined malignant Nos. 54b, c		Benign No. 56d		Nature unstated No. 57d		Total neoplasms			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1936	236	178	154	126	60	67	424	464	874	835	45	39
1937	242	181	166	114	77	64	434	421	919	780	47	37
1938	286	177	159	146	69	58	402	409	916	790	46	37
1939	232	189	139	110	87	97	492	476	950	872	48	40
1940	290	205	119	97	91	102	442	406	942	810	47	37
1941	306	200	137	91	108	113	396	378	947	782	47	36
1942	341	225	111	78	86	112	404	338	942	753	47	35
1943	326	222	134	99	100	128	383	356	943	805	46	37
1944	312	229	122	101	106	107	374	355	914	792	45	36
1945	364	252	148	112	114	140	430	393	1,056	897	51	41
1946	342	240	134	132	127	131	458	368	1,061	871	51	39
1947	403	283	167	105	133	154	419	356	1,122	898	54	40
1948	476	277	146	113	125	148	454	353	1,201	891	57	40
1949	510	349	175	115	127	161	446	340	1,258	965	59	43

(1) According to the classification in use from 1940 onwards. Prior to 1940 gliomas were classed by the International List as benign and when another disease was mentioned on a death certificate selection was according to rules which gave low precedence to benign neoplasms. This was remedied by the new method of selection which is in accordance with the preference expressed by the certifier. In 1939 the numbers assigned to the glioma group by the old rules were 180 males, 149 females, but there were 52 and 40 classed to other causes where the certifier considered the neoplasm to be the principal cause of death. This, together with the inclusion here of spinal cord and other parts of the nervous system, explains the differences between the numbers in this table and those in Table IV of the Review for 1938–39.

(2) Includes glioma of eye, and varieties set out in the International List, but excludes gliomas when specified as benign.

(3) See note * below Table LXXXV.

58. Rheumatic Fever.—In 1948 and 1949 respectively there were 447 and 329 deaths assigned to rheumatic fever. During the quinquennium 1940–44 the yearly average of deaths was 289 males, 366 females, and during 1945–49, 200 males and 219 females. The crude death rates per million which were 22 and 24 for males and females respectively in 1939, had decreased by about two-thirds to 7 and 8 in 1949. The Comparative Mortality Indices for males and females during recent years have been as follows :—

Sex	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Males ..	1·000	0·883	0·789	0·727	0·549	0·665	0·765	0·668	0·406	0·411	0·426	0·317
Females ..	1·000	0·887	0·802	0·550	0·458	0·668	0·548	0·475	0·311	0·341	0·394	0·284

The downward trend, which had been arrested in 1943, was resumed in 1946.

Death rates from rheumatic fever were rather lower in Greater London during 1948–49 than in the other density aggregates, but this may be partly due to the fact that the proportion of the population in the younger age groups was lower in Greater London than in the other density aggregates and deaths from rheumatic fever predominate in those under 20. The following table shows the death rates for persons per million living at all ages in 1947 to 1949.

Year	*Greater London*	*County boroughs*	*Urban districts*	*Rural districts*
1947	9	10	9	9
1948	9	10	11	11
1949	5	8	9	7

The distribution of civilian deaths in 1946 to 1949 by age and the median age at death were as follows :—

		0–	5–	10–	15–	20–	25–	35–	45–	55–	65 and over	Total	Median (in years)
1946 ..	M.	8	28	45	25	15	8	17	14	9	5	**174**	16·3
	F.	11	31	36	17	13	20	24	16	15	5	**188**	19·9
1947 ..	M.	5	30	41	21	10	25	20	14	10	12	**188**	19·4
	F.	12	38	47	18	14	22	22	9	9	15	**206**	16·8
1948 ..	M.	15	34	42	23	11	12	19	16	17	17	**206**	17·7
	F.	14	44	53	25	22	21	17	17	10	17	**240**	17·2
1949 ..	M.	7	28	31	20	7	15	15	10	10	11	**154**	17·9
	F.	8	29	54	13	9	19	13	15	8	6	**174**	14·7

Half the deaths for both males and females occurred before the age of 20 was reached, the age group 10–14 having the highest number of deaths.

Table XCIX.—Rheumatic Fever : Death Rates from Acute Rheumatism and Acute Rheumatic Carditis at different Ages in each year 1942 to 1949.

	Death rate per million living (civilians)															
	1942		1943		1944		1945		1946		1947		1948		1949	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
58a, b, c. Acute rheumatic carditis ..																
0–	8	4	6	4	3	6	9	6	5	6	2	6	5	6	4	4
5–	18	25	26	37	33	32	28	36	22	22	22	27	23	30	17	23
15–	18	18	27	24	23	20	27	13	18	9	13	9	12	13	10	7
25–	9	9	11	14	14	9	10	7	4	5	6	6	4	4	3	3
45–	4	5	6	5	6	7	5	5	3	3	3	3	4	3	2	3
65 and over..	4	3	3	5	5	4	4	2	1	0	4	3	5	3	3	1
58d. Rheumatic Fever without mention of heart																
0–	1	1	1	1	2	1	2	1	—	1	1	1	3	2	—	1
5–	3	4	5	8	6	8	4	4	4	3	3	4	3	5	3	6
15–	5	1	4	4	4	2	5	4	3	1	1	1	2	3	1	1
25–	2	2	3	3	2	2	2	1	1	1	1	1	1	1	2	1
45–	4	3	1	3	4	3	3	3	2	3	2	0	3	2	2	2
65 and over..	4	5	5	7	7	3	2	4	2	2	2	2	4	3	3	1
All Forms C.M.I. All ages ..	0·549	0·458	0·665	0·668	0·785	0·548	0·668	0·475	0·406	0·311	0·411	0·341	0·426	0·394	0·317	0·284

Table XCIX shows the death rates in 1942 to 1949 from rheumatic fever for six age groups, distinguishing cases where heart involvement is mentioned from those where it is not. In the last four years the average rates were lower for both sexes in each age group than those for the first four years, except for girls under 5, as may be seen from the following table :—

	Males						Females					
	0–	5–	15–	25–	45–	65 and over	0–	5–	15–	25–	45–	65 and over
Average 1942–45	8	31	28	13	8	9	6	39	22	12	9	8
Average 1946–49	5	24	15	6	5	6	7	30	11	6	5	4

The excess of average female death rates over male at ages 5–14 was 26 per cent. in the first four years and 25 per cent. in the second. In the age groups under 45 the proportion of deaths without mention of heart was about one-sixth, while in the higher age groups it was about one-half.

Table C.—Rheumatic Fever, Chorea, and Rheumatic Heart Disease : Deaths at different Ages of Civilians and Non-civilians from diseases of known Rheumatic origin and from Endocarditis of unspecified cause. 1948 and 1949.

	MALES				FEMALES	
	1948		1949		1948	1949
	Civilians	Non-civilians	Civilians	Non-civilians		
58. Rheumatic Fever						
0–	15	—	7	—	14	8
5–	76	—	59	—	97	83
15–	34	1	27	1	47	22
25–	31	—	30	—	38	32
45–	33	—	20	—	27	23
65 and over ..	17	—	11	—	17	6
All Ages ..	**206**	**1**	**154**	**1**	**240**	**174**
87a. Chorea						
0–	—	—	—	—	1	—
5–	3	—	—	—	2	1
15–	—	—	—	—	5	2
25–	1	—	3	—	2	6
45–	2	—	1	—	5	—
65 and over ..	—	—	—	—	3	4
All Ages ..	**6**	—	**4**	—	**18**	**13**
90a. Pericarditis						
0–	1	—	—	—	—	1
5–	3	—	4	—	4	3
15–	5	—	—	—	2	—
25–	3	—	—	—	2	2
45–	3	—	1	—	1	5
65 and over ..	2	—	1	—	7	4
All Ages ..	**17**	—	**6**	—	**16**	**15**
92b : 1. Mitral valve disease						
0–	1	—	2	—	2	—
5–	35	—	19	—	43	43
15–	89	—	91	1	125	109
25–	475	3	469	1	840	872
45–	940	1	957	—	1,517	1,679
65 and over ..	1,151	—	1,200	—	1,983	2,111
All Ages ..	**2,691**	**4**	**2,738**	**2**	**4,510**	**4,814**
92b : 2. Other Endocarditis specified as rheumatic						
0–	3	—	2	—	1	1
5–	26	—	30	—	36	22
15–	45	—	51	—	42	48
25–	180	1	171	—	225	213
45–	274	1	289	—	343	376
65 and over ..	204	—	250	—	308	343
All Ages ..	**732**	**2**	**793**	—	**955**	**1,003**

Table C—*continued.*

	MALES				FEMALES	
	1948		1949		1948	1949
	Civilians	Non-civilians	Civilians	Non-civilians		
93b. Myocarditis specified as rheumatic						
0–	2	—	—	—	1	—
5–	3	—	1	—	12	3
15–	5	—	4	—	3	6
25–	38	1	31	—	34	41
45–	70	—	66	—	118	82
65 and over ..	115	—	81	—	151	151
All Ages ..	**233**	**1**	**183**	—	**319**	**283**
95b. Other and ill-defined rheumatic heart disease						
0–	—	—	—	—	—	—
5–	1	—	1	—	2	—
15–	3	—	4	—	3	4
25–	19	—	16	—	15	24
45–	40	—	41	—	65	67
65 and over ..	24	—	25	—	42	42
All Ages ..	**87**	—	**87**	—	**127**	**137**
Total of known rheumatic origin						
0–	22	—	11	—	19	10
5–	147	—	114	—	196	155
15–	181	1	177	2	227	191
25–	747	5	720	1	1,156	1,190
45–	1,362	2	1,375	—	2,076	2,232
65 and over ..	1,513	—	1,568	—	2,511	2,661
All Ages ..	**3,972**	**8**	**3,965**	**3**	**6,185**	**6,439**
92c. Endocarditis, unspecified						
0–	—	—	—	—	—	—
5–	8	—	4	—	4	4
15–	10	—	15	—	11	9
25–	64	1	50	1	69	78
45–	400	—	399	—	434	402
65 and over ..	798	—	814	—	1,111	1,091
All Ages ..	**1,280**	**1**	**1,282**	**1**	**1,629**	**1,584**

Table C shows the number of deaths at different ages of civilians and non-civilians from diseases of rheumatic origin and endocarditis of unspecified origin in 1948 and 1949. The total number of deaths in 1948–49 known to be of rheumatic origin was, males 7,948, females 12,624, compared with 8,460 and 12,812 in 1946–47, decreases of 6 and 1·5 per cent. respectively. Deaths from endocarditis not stated to be of rheumatic origin numbered males 2,564, females 3,213, compared with males 3,322, females 4,133 in 1946–47, decreases of 23 and 22 per cent. respectively. The proportionate age distribution of

deaths in 1948 and 1949 due to mitral valve disease, other endocarditis specified as rheumatic and endocarditis unspecified was as follows :—

Age Group	Mitral valve disease		Other rheumatic endocarditis		Endocarditis unspecified	
	Males	Females	Males	Females	Males	Females
0–.. ..	1	0	3	1	—	—
5–.. ..	10	9	37	30	5	3
15–.. ..	33	25	63	46	10	6
25–.. ..	174	184	231	224	44	46
45–.. ..	349	343	369	367	312	260
65 and over	433	439	297	332	629	685
All ages ..	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**

Deaths from mitral valve disease occurred at rather higher ages than those due to other rheumatic endocarditis. In the case of endocarditis of unspecified cause the bulk of deaths occurred at ages 65 and over. This difference is probably due to differences in recording, since it has been estimated that between 50 and 80 per cent. of the unspecified deaths at ages 45 and over were actually of rheumatic origin, while at ages up to 45 it would be reasonably safe to assume that all were.

Table CI.—Acute and Chronic Rheumatic Heart Disease : Death Rates at different Ages per million living. 1940-49.

Disease	Year	Males						Females					
		0–	5–	15–	25–	45–	65 and over	0–	5–	15–	25–	45–	65 and over
Acute rheumatic carditis	1940–42	8	25	15	10	6	5	6	29	23	12	7	5
	1943–45	6	29	14	7	5	4	5	35	18	10	6	4
	1946–47	4	22	12	5	3	3	6	25	9	6	3	2
	1948–49	5	20	10	3	3	4	5	27	10	4	3	2
Endocarditis of rheumatic origin	1940–42	4	29	73	112	320	955	2	40	93	190	398	1,082
	1943–45	2	30	65	104	294	836	2	36	80	177	364	1,002
	1946–47	1	20	52	105	281	775	—	19	62	167	359	912
	1948–49	2	19	46	98	260	717	2	26	55	161	355	872
Other and ill-defined chronic rheumatic heart disease	1940–42	—	4	7	12	37	117	—	4	9	19	45	136
	1943–45	—	3	6	8	27	77	—	5	5	12	34	89
	1946–47	—	5	5	9	29	79	1	6	7	12	35	88
	1948–49	1	2	4	8	24	63	1	4	3	9	31	73
Total heart disease of rheumatic origin.	1940–42	12	57	95	134	364	1,077	9	73	126	221	450	1,224
	1943–45	8	63	85	119	327	917	8	76	103	199	403	1,096
	1946–47	4	46	67	118	314	857	6	49	77	184	397	1,001
	1948–49	8	41	59	109	286	784	7	57	68	174	389	947
Endocarditis unspecified.	1940–42	1	3	9	21	199	800	1	3	10	28	179	801
	1943–45	—	2	6	21	154	661	1	3	8	23	136	659
	1946–47	—	2	5	13	120	530	1	3	5	19	104	522
	1948–49	—	2	4	9	85	412	—	1	4	11	76	405

From Table CI it will be seen that compared with 1940–42, the mortality from heart diseases known to be of rheumatic origin had, by 1948–49, declined among males by about 20 per cent. at ages 25–64 and nearly 40 per cent. at ages 15–24, and for females by 14 per cent. at ages 45–64, 21 per cent. at ages 25–44 and 46 per cent. at ages 15–24. The percentage decrease in rates for endocarditis unspecified varied for males between 33 per cent. at ages 5–14 and 57 per cent. at ages 25–64, and for females between 49 per cent. at ages 65 and over and 67 per cent. at ages 5–14.

Table CII.—Rheumatoid Arthritis and Other Articular Rheumatism : Death Rates by Sex and Age. 1939 to 1949.

Year	Death Rates per Million living*											
	MALES						FEMALES					
	0–	25–	45–	55–	65–	75 and over	0–	25–	45–	55–	65–	75 and over
59a. Rheumatoid Arthritis												
1939 ..	—	2·2	13·1	37	98	202	0·1	5·1	26·9	86	240	489
1940 ..	0·6	2·2	12·0	43	95	200	0·5	3·4	27·0	103	255	590
1941 ..	0·5	1·9	10·8	40	105	272	0·3	5·6	25·1	75	242	504
1942 ..	0·3	3·2	10·7	47	102	239	0·9	3·3	23·9	75	201	455
1943 ..	0·7	1·7	8·2	35	88	214	0·5	4·6	18·8	78	217	429
1944 ..	0·7	1·7	12·1	35	82	194	0·7	3·9	22·7	68	193	397
1945 ..	0·7	3·2	10·7	39	77	165	0·7	5·1	21·5	66	192	431
1946 ..	0·5	2·1	7·9	29	81	153	0·3	4·0	17·0	68	176	369
1947 ..	0·9	0·8	6·5	34	65	185	0·3	3·0	20·5	52	173	371
1948 ..	0·8	1·7	9·7	22	60	136	—	2·5	13·6	58	177	370
1949 ..	0·4	2·9	6·5	28	76	142	0·3	2·5	17·4	62	171	400
59b. Other Chronic Articular Rheumatism												
1939 ..	0·3	1·1	4·6	14	39	125	0·3	0·7	4·3	13	31	119
1940 ..	0·1	0·5	3·3	13	36	76	—	1·2	2·8	12	52	121
1941 ..	0·1	1·1	5·0	14	38	73	0·1	0·6	1·8	13	37	138
1942 ..	—	1·1	2·5	12	30	74	—	0·4	3·9	8	31	129
1943 ..	—	1·4	3·3	10	29	93	0·1	0·4	2·8	11	34	120
1944 ..	—	2·0	0·8	9	26	71	—	0·6	5·5	8	35	119
1945 ..	—	0·8	4·4	7	32	98	—	0·1	2·0	10	34	109
1946 ..	—	0·9	1·2	10	32	93	—	0·6	3·7	13	36	143
1947 ..	—	0·9	2·7	8	25	90	0·1	0·6	2·7	6	40	124
1948 ..	0·1	1·1	3·7	9	28	75	—	0·3	1·0	8	27	108
1949 ..	0·4	0·8	2·5	8	28	96	—	0·3	2·3	10	31	126

* Including deaths of non-civilians in England and Wales, and based on total population inclusive of Armed Forces at home and abroad. Rates for 1939 conform with the classification in use from 1940 onwards.

59a, b. Rheumatoid arthritis and Other Chronic Articular Rheumatism.—Table CII shows the death rates per million living from rheumatoid arthritis and other chronic articular rheumatism from 1939 to 1949. For rheumatoid arthritis the women's rates at ages 25 and upwards were usually more than double those for males, whereas for deaths from other chronic articular rheumatism the female excess is only marked at ages 75 and over.

The following table compares the rates in 1939 with the averages for 1940–45 and 1946–49.

Disease	Year	Males						Females					
		0–	25–	45–	55–	65–	75 and over	0–	25–	45–	55–	65–	75 and over
Rheumatoid arthritis	1939	—	2·2	13·1	37	98	202	0·1	5·1	26·9	86	240	489
	1940–45	0·6	2·3	10·8	40	92	214	0·6	4·3	23·2	78	217	468
	1946–49	0·7	1·9	7·7	28	71	154	0·2	3·0	17·1	60	174	378
Other chronic articular rheumatism	1939	0·3	1·1	4·6	14	39	125	0·3	0·7	4·3	13	31	119
	1940–45	0·0	1·2	3·2	11	32	81	0·0	0·6	3·1	10	37	123
	1946–49	0·1	0·9	2·5	9	28	89	0·0	0·5	2·4	9	34	125

During 1940–45 there was an increase in the death rates for males from rheumatoid arthritis at ages 55–64 and 75 and over, but the average for 1946–49 fell below the 1939 figure. For other chronic articular rheumatism the average rate during 1940–45 for males aged 75 and over was less than two-thirds of the 1939 figure, but increased in 1946–49. The death rates for females for other chronic articular rheumatism increased at ages 75 and over from 119 in 1939 to 125 in 1946–49, and at ages 65–74 both averages were above the 1939 rate.

Table CIII.—Diabetes Mellitus : Death Rates by Sex and Age, 1931 to 1949.

	Death rates per million living*									C.M.I. all ages†
	0–	15–	25–	35–	45–	0–54 E.A.D.R.	55–	65–	75 and over	
Males										
1931 ..	12	22	27	33	67	30	195	507	705	0·956
1932 ..	10	21	28	39	65	31	199	556	802	1·008
1933 ..	13	26	28	31	56	29	202	550	809	1·002
1934 ..	11	22	25	28	61	28	207	555	796	0·996
1935 ..	11	16	22	26	62	26	203	578	834	0·988
1936 ..	11	17	24	25	72	28	212	635	1,017	1·045
1937 ..	12	18	24	35	63	29	210	619	978	1·053
1938 ..	8	14	20	30	58	24	193	549	936	1·000
1939 ..	9	18	19	30	61	26	196	588	1,024	1·041
1940 ..	12	19	20	33	55	26	207	642	1,086	1·152
1941 ..	11	19	19	35	57	27	192	555	809	1·021
1942 ..	10	15	24	26	51	24	157	477	765	0·908
1943 ..	8	18	20	33	51	24	136	419	676	0·842
1944 ..	7	14	15	22	41	19	123	422	645	0·761
1945 ..	5	12	15	21	47	19	108	382	660	0·721
1946 ..	5	10	11	20	35	15	116	336	612	0·633
1947 ..	5	9	11	17	34	14	94	318	586	0·572
1948 ..	3	6	12	15	32	13	92	254	532	0·503
1949 ..	2	12	6	11	31	11	80	297	576	0·521
Females										
1931 ..	11	24	27	40	96	37	327	713	792	0·942
1932 ..	13	19	25	41	94	36	337	744	793	0·957
1933 ..	12	24	26	43	94	37	327	765	826	0·972
1934 ..	10	17	25	39	99	35	344	786	872	0·990
1935 ..	9	20	25	35	96	35	352	807	914	1·008
1936 ..	10	19	21	43	99	36	365	898	1,001	1·042
1937 ..	12	20	20	36	106	36	343	857	1,054	1·045
1938 ..	10	17	15	31	93	31	308	801	1,001	1·000
1939 ..	12	18	21	31	98	34	352	832	1,047	1·051
1940 ..	10	26	21	32	100	35	343	827	1,006	1·067
1941 ..	9	23	22	33	83	32	302	760	932	0·969
1942 ..	8	26	29	31	68	30	258	692	814	0·870
1943 ..	6	25	30	36	80	33	243	649	772	0·843
1944 ..	6	20	21	24	62	25	217	643	802	0·783
1945 ..	7	16	20	28	59	24	215	663	725	0·770
1946 ..	4	11	13	22	53	19	208	579	724	0·696
1947 ..	4	10	11	21	48	17	197	542	736	0·663
1948 ..	2	12	11	17	34	14	173	478	751	0·601
1949 ..	4	11	12	10	43	15	161	523	791	0·628

* Including deaths of non-civilians in England and Wales and based on total populations in 1939 to 1949 inclusive of armed forces at home and abroad. Rates for years 1931 to 1939 conform with the classification method in use from 1940 onwards (conversion ratios for each sex-age group were obtained from a dual classification for years 1938 and 1939, and the resulting deaths in years 1931 to 1937 were adjusted slightly to produce the totals at all ages as shown in Table 6).

† Based on deaths of civilian males from 3rd September, 1939, and of civilian females from 1st June, 1941.

61. Diabetes Mellitus.—Deaths from this condition numbered 3,255 and 3,445 in 1948 and 1949, about two-thirds of the deaths being of women. Table CIII shows the death rates per million by sex and age from 1931, the earlier rates having been adjusted for changes in method of assignment in force from 1940 onwards ; this table also shows the Comparative Mortality Indices for persons of all ages. The C.M.I. had fallen steadily for both males and females from 1940 to 1948, but in 1949 there was a slight increase in each sex. The Equivalent Average Death Rate at ages under 55 decreased during 1941–49 for males but for females it was a little higher in 1949 than 1948. Among those aged 55 and over, the rates for both men and women decreased in 1948–49 at ages 55–64, but at 65–74 and 75 and over the rates for 1949 were higher than those for 1948, and in the case of women aged 75 and over the rates have been rising since 1946.

The death rates for males and females in different age groups are shown as percentages of the 1938–39 rates in Table CIV. Young women aged 15–34, whose rates during the war were about 33 per cent. above those for 1938–39, showed rates in 1949 which were roughly two-thirds of those for the two pre-war years. Rates for young men aged 15–24, did not rise above the 1938–39 level during the war, and in 1949 their rate was three-quarters of the pre-war rate.

Table CIV.—Diabetes Mellitus : Death Rates at different Ages in 1923-25, 1931-35 and 1936-39 per cent. of those in 1920-22 ; 1940-45 and in each year 1946 to 1949 per cent. of those in 1938-39.

	Per cent. of corresponding rate in 1920–22			Per cent. of corresponding rate in 1938–39				
	1923–25	1931–35	1936–39	1940–45	1946	1947	1948	1949
Males								
0–	71	79	64	113	62	62	38	25
15–	67	50	38	100	62	56	38	75
25–	72	47	36	100	58	58	63	32
35–	75	52	49	93	67	57	50	37
45–	76	68	65	83	58	57	53	52
55–	101	104	101	79	60	48	47	41
65–	107	134	140	84	59	56	45	52
75 and over ..	118	167	209	78	62	60	54	59
Females ..								
0–	69	69	69	73	36	36	18	36
15–	83	63	53	135	65	59	71	65
25–	75	60	45	133	72	61	61	67
35–	85	73	54	100	71	68	55	32
45–	95	98	98	79	56	51	36	45
55–	111	136	135	79	63	60	52	49
65–	118	179	193	86	71	66	59	64
75 and over ..	121	205	253	82	71	72	73	77

Table CV.—Diabetes Mellitus : Death Rates per million living by Sex at Ages 45-64 and 65 and over in Geographical Regions and class of Area, 1949.

Area	45–64		65 and over	
	M.	F.	M.	F.
England and Wales	**52**	**96**	**381**	**614**
Regional Summary :				
South East	49	74	331	507
Greater London	43	64	346	550
Remainder of South East	56	87	315	462
North	58	110	415	677
North I	53	118	310	735
North II	63	67	565	590
North III	47	94	392	708
North IV	65	124	433	661
Midland	50	101	404	679
Midland I	46	109	362	635
Midland II	57	86	479	764
East	28	100	385	726
South West	43	91	421	566
Wales	70	140	384	737
Wales I	56	150	329	646
Wales II	110	115	500	906
Density Summary :				
County boroughs*	48	93	352	621
Other urban districts*	60	115	430	639
Rural districts*	52	103	372	621

* Excluding Greater London.

Table CV shows the regional distribution of deaths from diabetes per million living at ages 45–64 and 65 and over. The following table compares regional rates with those of England and Wales and also shows the ratio of female to male rates in each area.

Area	45–64			65 and over		
	M.	F.	F/M ratio	M.	F.	F/M ratio
England and Wales	**100**	**100**	**1·85**	**100**	**100**	**1·61**
Greater London	83	67	1·49	91	90	1·59
Rest of South East	108	91	1·55	83	75	1·47
North	112	115	1·90	109	110	1·63
Midland	96	105	2·02	106	111	1·68
East	54	104	3·57	101	118	1·89
South West	83	95	2·12	110	92	1·34
Wales	135	146	2·00	101	120	1·92
Density Summary :						
County boroughs*	92	97	1·94	92	101	1·76
Other urban districts* ..	115	120	1·92	113	104	1·49
Rural districts*	100	107	1·98	98	101	1·67

* Excluding Greater London.

At ages 45–64, Wales and the North had the highest rates for both males and females; at ages 65 and over, excluding the South East, there was little regional variation in male rates. In the Eastern region the female rates at ages 45–64 were three-and-a-half times the male, whereas in the South East (including Greater London) they were only one-and-a-half times as great. The ratio of female to male rates at ages 65 and over was less than at ages 45–64, except in Greater London, and there was less regional variation in the ratios than for the lower age group. Among the density aggregates the highest rates for both sexes and age groups occurred in urban districts outside the county boroughs; the latter, except for females aged 65 and over, had lower rates than the rural districts.

63b. Exophthalmic Goitre.—In 1948, 65 males and 550 females, and in 1949, 79 males and 504 females, died from exophthalmic goitre. The average yearly number of deaths in the quinquennial periods 1940–44 and 1945–49 were, males 123 and 77; females 776 and 565. The general downward trend in the C.M.I. was continued for women in 1948–49, but for men the index was slightly higher in 1949 than in the two preceding years (Table CVI). Rates for women were highest in the three age groups between 45 and 75, and the average rates for 1948–49 as percentages of the highest recorded rates in the same age groups were 24 per cent. of the 1936 rate, 37 per cent. of the 1937 rate and 47 per cent. of the 1937 rate respectively, the corresponding figures for men being 29, 34 and 50 per cent.

Table CVI.—Exophthalmic Goitre: Death Rates by Sex and Age in each year, 1931-49.

Year	Death rates per million living*								C.M.I. All Ages†
	0–	15–	25–	35–	45–	55–	65–	75 and over	
Males									
1931 ..	0	2	4	7	13	18	12	11	0·772
1932 ..	—	3	6	9	14	24	16	3	0·911
1933 ..	0	4	5	10	14	20	16	8	0·917
1934 ..	0	2	5	12	17	23	15	7	0·976
1935 ..	—	3	5	8	18	23	20	12	0·973
1936 ..	—	4	6	12	21	25	14	5	1·083
1937 ..	—	2	6	8	17	24	19	6	0·986
1938 ..	—	1	4	13	15	24	22	5	1·000
1939 ..	0	1	4	8	19	28	25	12	1·014
1940 ..	0	1	5	10	15	23	26	7	1·022
1941 ..	—	2	4	6	15	22	15	17	0·890
1942 ..	—	1	2	8	11	18	16	5	0·721
1943 ..	0	2	1	4	9	20	16	6	0·695
1944 ..	—	—	1	4	9	14	12	4	0·539
1945 ..	0	1	1	2	11	14	12	8	0·571
1946 ..	0	2	1	4	6	9	18	2	0·444
1947 ..	—	1	1	2	7	10	13	7	0·426
1948 ..	—	—	1	3	5	8	14	7	0·358
1949 ..	—	1	1	4	7	11	12	7	0·434

Table CVI—*continued.*

Year	Death rates per million living*								C.M.I. All Ages†
	0–	15–	25–	35–	45–	55–	65–	75 and over	
Females									
1931 ..	1	19	30	60	104	128	103	53	0·935
1932 ..	1	18	31	61	116	136	113	35	0·982
1933 ..	1	19	30	55	123	125	119	44	0·974
1934 ..	1	16	26	55	120	152	139	50	1·018
1935 ..	1	14	30	61	117	153	152	45	1·050
1936 ..	1	14	26	55	123	165	174	83	1·120
1937 ..	1	13	28	52	112	172	188	66	1·097
1938 ..	1	12	21	40	105	160	173	67	1·000
1939 ..	0	12	18	45	110	140	183	89	0·987
1940 ..	0	10	17	32	83	134	148	86	0·837
1941 ..	0	7	14	31	69	99	112	64	0·663
1942 ..	1	6	11	29	59	94	95	74	0·604
1943 ..	—	6	10	22	57	90	107	45	0·565
1944 ..	—	2	9	17	47	65	88	49	0·447
1945 ..	—	3	9	13	43	75	80	42	0·434
1946 ..	—	4	7	12	38	76	101	52	0·450
1947 ..	0	2	6	13	40	71	110	68	0·462
1948 ..	—	2	5	14	36	68	80	65	0·408
1949 ..	—	3	4	11	24	59	96	55	0·369

* Including deaths of non-civilians in England and Wales, and based on total populations inclusive of armed forces at home and abroad in 1939 to 1949. Rates for 1931–39 conform with the method of classification from 1940 onwards.

† Based on deaths of civilian males from 3rd September, 1939, and of civilian females from 1st June, 1941.

Regional analyses of death rates, especially those of females, have always shown considerable variation between districts. Table CVII compares the regional rates for 1947 and 1949.

Table CVII.—Exophthalmic Goitre : Death Rates per million living, in Regions and different classes of Area, 1947 and 1949.

Area	Death rate (civilians)			
	Males		Females	
	1947	1949	1947	1949
England and Wales	**4**	**4**	**28**	**22**
Regional Summary :				
Greater London	3	4	18	14
Remainder of South East ..	2	4	27	19
North I	5	2	32	15
North II	3	5	39	27
North III	3	2	26	23
North IV	5	5	32	21
Midland I	7	3	27	26
Midland II	3	5	26	22
East	4	6	20	21
South West	4	4	45	47
Wales I	2	2	33	32
Wales II	—	9	51	45
Density Summary :				
County boroughs*	4	4	24	17
Other urban districts* ..	4	4	32	25
Rural districts*	4	4	37	35

* Excluding Greater London.

The number of male deaths is very small in some of the regions and the figures for single years may be affected by chance fluctuations. For females the death rates had decreased in every region except the East and South West. Greater London had the lowest rate in 1949 as in 1947. Female rates continued to show a decrease of mortality with increasing urbanisation, but whereas in the county boroughs the rate in 1949 was only 71 per cent. of the 1947 rate, in rural districts it was still 95 per cent. of the 1947 rate.

64. Diseases of the Thymus (including status lymphaticus).—Deaths attributed to this cause were first distinguished (as status lymphaticus) in 1911 and rose rapidly from 121 deaths in that year to 238 in 1914. There was a decline from 198 in 1916 to 146 in 1917, and to 110 in 1919; then deaths rose to 175 in 1921 and remained at about that level for the next ten years. In 1931 when the more general title "disease of the thymus" was introduced there were 167 deaths and thereafter the numbers have declined to 81 in 1947, 65 in 1948 and 30 in 1949. Despite the small numbers involved this disease has been of some interest owing to the association of status lymphaticus with some deaths under anæsthesia. Apart from such anæsthesia deaths, the deaths primarily assigned to diseases of the thymus are almost wholly in children under five with males considerably outnumbering females.

Table CVIII.—Deaths (including those of non-civilians) classified to International List No. 64. Diseases of the Thymus, 1948-49.

	0–	5–	10–	15–	20–	25 and over
Males						
Status Lymphaticus	17	—	—	2	—	—
Enlarged Thymus	23	—	1	3	—	1
Abscess of Thymus and other diseases in 64	10	—	—	1	—	2
Total	**50**	—	**1**	**6**	—	**3**
Females						
Status Lymphaticus	8	1	2	—	—	—
Enlarged Thymus	13	—	—	—	—	2
Abscess of Thymus and other diseases in 64	7	—	1	—	—	—
Total	**28**	**1**	**3**	—	—	**2**

65a. Addison's Disease not specified as tuberculous.—Though this disease is usually of tuberculous origin, mention of the pathogen is often omitted from the death certificate. If tuberculosis is mentioned, assignment is to rubric 21a of the International List (5th Revision). The relative numbers in 1948–49 were (non-civilians included):

	0–14	15–44	45–64	65 and over	All ages
Males					
Tuberculosis—specified ..	—	13	16	2	**31**
—not specified ..	3	24	31	15	**73**
Females					
Tuberculosis—specified ..	—	12	11	2	**25**
—not specified ..	2	67	64	22	**155**

Not only does the disease occur more often in women than men but tuberculosis is less often mentioned on certificates of females; the result is that among deaths without mention of tuberculosis the females are nearly twice as numerous as males. The deaths are well spread over the adult ages.

If the 228 deaths from Addison's disease without mention of tuberculosis were to be classed as tuberculous the total mortality from tuberculosis (all forms) would be increased by only 0·5 per cent., but the non-respiratory tuberculosis mortality taken alone would be increased by 4·3 per cent.

66b : 1. Pink Disease (acrodynia, dermato-neuritis, erythrœdema, erythrœdema polyneuritica and pink disease).—Deaths in 1931 classed to this cause numbered 26. The annual numbers rose to 42 in 1933 and thereafter did not differ significantly from 50, except in 1936 when 75 were so assigned, until 1947 when a sudden rise occurred. Deaths from 1940 have been as follows :—

Year	*Persons*	*Year*	*Persons*
1940	49	1945	48
1941	47	1946	48
1942	50	1947	103
1943	49	1948	71
1944	50	1949	66

The rise in 1947 was significant, general throughout the year and distributed over the whole country. In 1948 and 1949 the annual deaths remained above the level obtaining before 1947. Though the majority of the deaths are of infants and affect both sexes equally, the rise in 1947 was only partially attributable to the post-war rise in fertility. The death rates from pink disease at ages under 1 year, per million related live births were :—

1946	44·7	1948	62·1
1947	84·2	1949	64·0

66b : 2. Idiopathic steatorrhœa (cœliac disease, sprue, psilosis).—Deaths from 1940 to 1949 were 25, 57, 69, 65, 56, 78, 88, 62, 59, 40 (including non-civilians). The age distribution of deaths in the two years 1948 and 1949 by sex is shown below.

	0–4	*5–44*	*45–64*	*65 and over*	*All ages*
Males	14	9	15	3	41
Females	23	13	12	10	58

In both years there was a female excess more especially at ages under 5 where rather more than a third of the deaths were concentrated.

70. Rickets.—This is no longer a significant cause of infant mortality. Deaths numbered 222 in 1931 but in 1940 had fallen to 56 and in the four years 1946, 1947, 1948, 1949 the numbers have been 16, 16, 7, 7.

73a. Pernicious Anæmia.—Deaths from this cause (including non-civilians) numbered 1,683 in 1931, 1,771 in 1938, and from 1944 to 1949 the deaths have been 1,827, 2,100, 1,470, 1,482, 1,208, 1,211. There was a sharp fall in mortality in 1946 and a smaller yet still sudden fall in 1948. From 1931 to 1938 the C.M.I. (Table CIX) had declined slowly for both sexes but during the war

Table CIX.—Pernicious Anæmia : Death Rates by Sex and Age in each year, 1931 to 1949.

Year	Death rates per million living*									C.M.I. All Ages†
	0–	15–	25–	35–	45–	0–54 E.A.D.R.	55–	65–	75 and over	
Males										
1931 ..	0	1	4	10	35	9	123	240	233	1·097
1932 ..	0	2	4	9	44	11	132	285	263	1·252
1933 ..	0	1	2	13	44	11	119	243	248	1·138
1934 ..	0	2	3	9	36	9	113	236	254	1·073
1935 ..	0	2	3	8	29	8	101	253	262	1·043
1936 ..	0	2	2	9	26	7	85	242	312	0·996
1937 ..	0	2	1	7	26	7	88	214	300	0·928
1938 ..	0	1	4	7	24	7	81	246	334	1·000
1939 ..	1	1	4	6	26	7	94	248	324	1·039
1940 ..	0	1	2	8	32	8	95	285	416	1·199
1941 ..	0	2	3	7	27	7	97	322	470	1·291
1942 ..	0	1	2	7	16	5	93	311	404	1·186
1943 ..	0	0	4	4	23	6	69	262	400	1·057
1944 ..	—	1	1	5	17	4	60	234	403	0·950
1945 ..	0	0	1	6	15	4	78	246	440	1·040
1946 ..	0	0	2	2	10	3	38	165	285	0·643
1947 ..	—	—	1	2	9	2	44	163	337	0·673
1948 ..	—	0	1	3	4	1	27	140	292	0·541
1949 ..	—	—	1	2	4	1	27	118	297	0·506
Females										
1931 ..	0	3	10	28	66	19	164	270	190	1·094
1932 ..	0	3	9	30	76	21	178	309	274	1·251
1933 ..	0	2	11	29	63	19	158	300	265	1·160
1934 ..	0	3	7	28	65	19	147	284	301	1·132
1935 ..	0	3	10	23	56	17	139	287	314	1·095
1936 ..	0	2	7	25	60	70	115	265	301	1 015
1937 ..	1	3	8	20	46	14	127	291	353	1 037
1938 ..	0	2	8	19	43	13	106	287	372	1·000
1939 ..	0	3	8	17	49	14	123	299	400	1·120
1940 ..	0	2	8	19	47	14	145	323	446	1·176
1941 ..	0	4	8	23	58	17	138	380	509	1·320
1942 ..	0	3	8	19	41	13	134	330	495	1·184
1943 ..	—	2	5	13	38	11	97	316	491	1·057
1944 ..	—	1	5	11	30	9	83	289	399	0·908
1945 ..	0	2	3	9	40	10	95	299	505	1·031
1946 ..	—	2	2	9	20	6	68	212	407	0·750
1947 ..	—	1	3	4	17	5	65	201	421	0·718
1948 ..	—	0	1	3	12	3	44	164	350	0·563
1949 ..	—	1	—	4	13	3	50	160	348	0·574

* Including deaths of non-civilians in England and Wales and based on total populations in 1939 to 1949 inclusive of armed forces at home and abroad. Rates for years 1931 to 1939 conform with the classification in use from 1940 onwards. (Conversion ratios for each sex-age group were obtained from a dual classification for years 1937 to 1939, and the resulting deaths in years 1931 to 1936 were adjusted slightly to produce the totals at all ages as shown in Table 6.)

† Based on deaths of civilian males from 3rd September, 1939, and of civilian females from 1st June, 1941.

there was a sharp rise in the C.M.I. to a peak in 1941 of 1·291 for males and 1·320 for females as the impact of adverse conditions was felt by sufferers from this disease, most of whom were elderly and passing through what was usually a long chronic stage in the disease. This sharp rise was soon exhausted as advanced cases succumbed leaving the remainder on the average less advanced (much in the same way as the sharp rise in tuberculosis mortality was exhausted early in the war by the anticipation of deaths of advanced cases, Stocks 1942*). By 1945 the C.M.I. had declined to parity with 1938. Peace brought an increase in medical manpower for civilian purposes and a consequent improvement in diagnosis and supervision ; an important factor in such a hitherto intractable chronic disease. In 1946 a sharp fall in mortality occurred which restored the mortality to the level to which it might have been expected to fall if the trend of 1931 to 1938 had not been interrupted by the war. Improvement in liver extract and the introduction of vitamin B12 have probably been responsible for the accelerated decline in mortality since 1946, resulting in C.M.I's. in 1949 of—males 0·506, females 0·574. However, the individual years 1947 and 1949 showed little, if any, improvement and it should be borne in mind that pernicious anæmia is a chronic disease which might be expected to share with other chronic diseases the higher mortality (mainly respiratory) of those years. The reduction in mortality has occurred at more advanced ages almost as much as at less advanced ages. The death rates by age and sex are shown in Table CIX. The rates are higher in females than in males.

In addition to deaths certified as pernicious anæmia and assigned to 73a, it may be assumed that deaths certified as due to sub-acute combined degeneration of the cord without mention of pernicious anæmia on the death certificate and classed to 82 : 2 are also in fact associated with pernicious anæmia. Deaths assigned to 82 : 2 averaged 95 per year in 1935–39, and 81 per year in 1940–45 ; the deaths in the years 1946 to 1949 were 55, 63, 44, 46, thus following the same movements as were exhibited by the deaths assigned to pernicious anæmia.

74a, b. Leukæmia and Aleukæmia.—Deaths from these two diseases combined have been increasing ever since they were first distinguished from anæmia in 1911. In that year there were 382 deaths from leukæmia ; in 1921, 446 ; in 1931, 685. Including non-civilians there were 1,004 deaths from the two diseases combined in 1941, 1,507 in 1948 and 1,721 in 1949. Table CX gives the death rates by age and sex since 1931 together with the C.M.I. There was a male excess at all ages and mortality was highest under 5 years of age and above the age of 65. After early childhood the rate fell and then in adult life rose again steadily with advancing age, until reaching a peak at about age 70.

The secular rise in mortality since 1931 has affected both sexes equally. The increase in the rates for individual age groups is almost equal up to age 65 —they have been roughly doubled between 1931 and 1949. At ages over 65 the increase is larger—the rates for 75 and over have increased threefold. The C.M.I. for males has increased from 0·695 in 1931 to 1·494 in 1949 and for females it has increased from 0·723 to 1·507. For a disease which has been recognised for so long, it seems unlikely that improving diagnosis could wholly account for such a long continued, and such a large, rise in mortality, which has been more than doubled in twenty years. The true source of the rise in mortality is as obscure as the ætiology of the disease itself.

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* Stocks, P. (1942), Brit. Med. J. ii, 750.

Table CX.—Leukæmia and Aleukæmia : Death Rates by Sex and Age in each year, 1931 to 1949.

Year	Death rates per million living*									C.M.I. All Ages†
	0–	5–	15–	25–	35–	45–	55–	65–	75 and over	
Males										
1931 ..	26	13	11	14	13	24	32	48	34	0·695
1932 ..	23	15	12	11	15	26	38	46	30	0·710
1933 ..	23	17	14	10	12	22	40	61	21	0·735
1934 ..	29	16	14	14	21	23	41	62	46	0·833
1935 ..	28	18	18	15	12	27	35	56	33	0·808
1936 ..	30	16	20	12	16	25	54	65	48	0·894
1937 ..	39	17	12	13	22	28	51	59	39	0·904
1938 ..	34	19	15	15	22	30	47	86	41	1·000
1939 ..	38	18	16	16	16	28	57	76	37	0·957
1940 ..	38	19	16	16	22	34	52	59	66	1·033
1941 ..	37	22	18	17	17	25	48	64	43	0·973
1942 ..	36	27	17	16	21	30	54	65	59	1·119
1943 ..	42	26	16	16	21	38	56	79	70	1·218
1944 ..	39	24	14	15	22	36	70	79	63	1·215
1945 ..	45	21	21	18	20	38	60	104	71	1·291
1946 ..	39	25	22	22	25	50	80	82	73	1·364
1947 ..	49	26	15	19	24	42	68	99	68	1·283
1948 ..	51	25	20	10	26	41	75	114	97	1·338
1949 ..	52	24	24	24	26	40	89	114	117	1·494
Females										
1931 ..	21	12	7	10	11	24	28	28	14	0·723
1932 ..	24	10	9	8	12	21	29	39	21	0·761
1933 ..	17	12	9	11	14	19	37	35	20	0·804
1934 ..	24	13	6	11	15	22	34	41	16	0·825
1935 ..	20	14	10	9	15	23	38	39	36	0·876
1936 ..	21	12	11	14	17	29	44	40	38	0·987
1937 ..	23	12	9	13	15	26	35	48	28	0·914
1938 ..	28	12	14	13	18	29	32	43	55	1·000
1939 ..	25	14	12	13	15	25	41	56	52	1·053
1940 ..	35	13	13	11	19	25	38	57	45	1·043
1941 ..	25	13	14	10	17	21	42	47	42	0·964
1942 ..	32	12	12	13	19	32	45	45	36	1·075
1943 ..	25	16	15	14	15	31	41	57	44	1·084
1944 ..	27	16	14	13	20	32	47	56	41	1·147
1945 ..	35	18	14	15	25	26	54	61	44	1·251
1946 ..	31	19	15	18	23	36	53	63	39	1·304
1947 ..	37	21	15	14	21	38	53	72	56	1·368
1948 ..	33	19	13	15	23	33	47	75	63	1·304
1949 ..	43	20	18	14	21	36	61	94	62	1·507

* Including deaths of non-civilians in England and Wales, and based on total populations inclusive of armed forces at home and abroad in 1939 to 1949. Rates for 1931 to 1939 conform with the method of classification in use from 1940 onwards.

† Based on deaths of civilian males from 3rd September, 1939, and of civilian females from 1st June, 1941.

77. Alcoholism and 124. Cirrhosis of the Liver.—Civilian deaths attributed solely to alcoholism, or to some disease stated to be due to alcoholism, numbered 46 and 50 in 1948 and 1949, and those attributed to other causes but with alcoholism as a contributory factor numbered 106 in each year. Table CXI shows the numbers of deaths in 1948 and 1949 in these two categories and also the primary causes with which alcoholism was mentioned. The number of deaths of women in 1949, 24 in the former and 34 in the latter class, were the highest since 1941. Of deaths with alcoholism as a stated contributory cause, those assigned to cirrhosis of the liver numbered 75 and 30 for males and females respectively in the two years.

Table CXI.—Deaths from or connected with Alcoholism : 1948 and 1949.

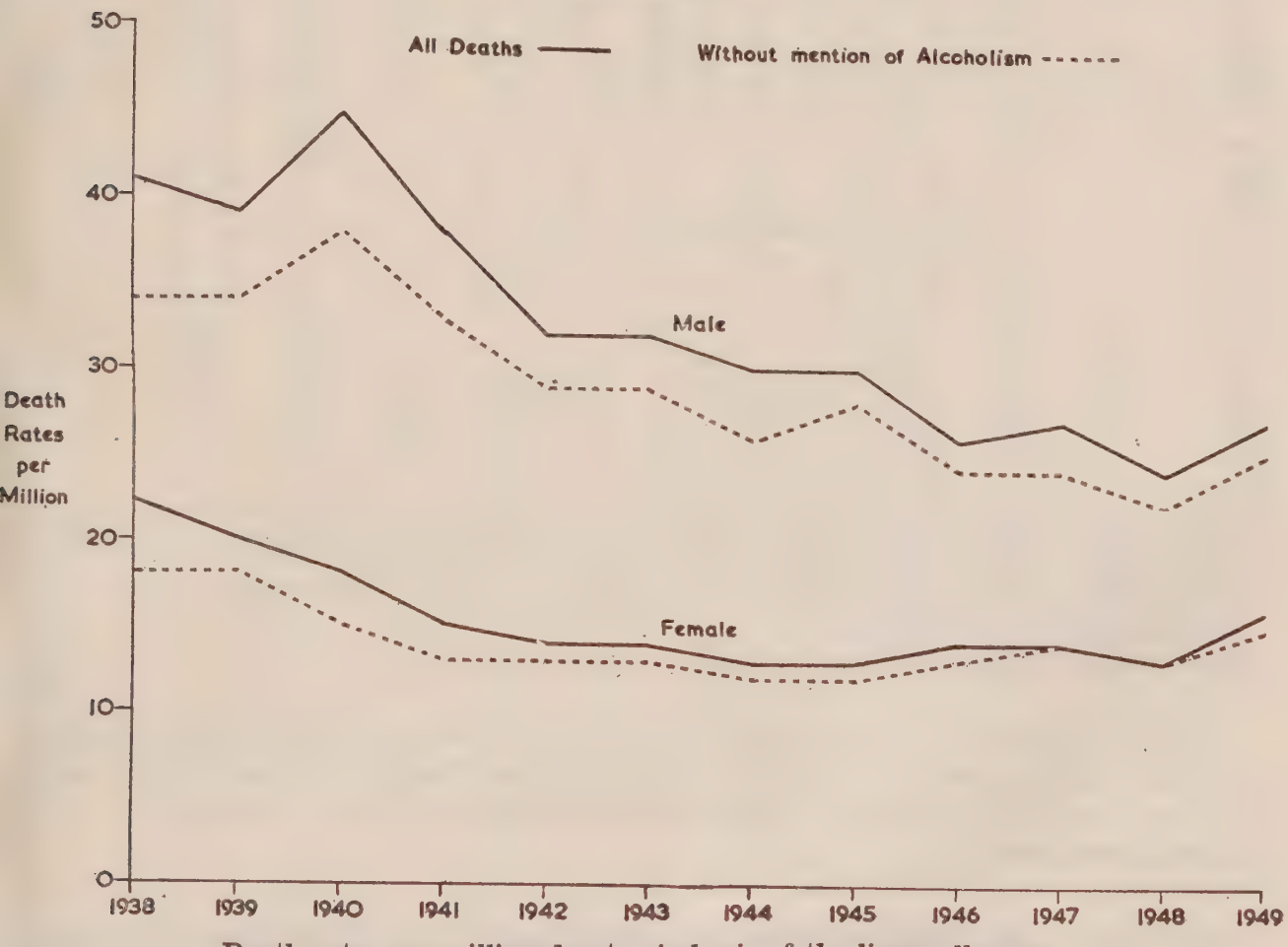
		Deaths of Civilians				Non-civilians	
		1948		1949		1948–49	
		M.	F.	M.	F.	M.	F.
77.	Attributed solely to alcoholism or to some disease stated to be due to alcoholism.						
	0–	—	—	—	—	—	—
	25–	—	—	2	1	—	—
	35–	4	3	9	—	—	—
	45–	12	6	6	10	—	—
	55–	11	4	4	5	—	—
	65–	3	1	4	4	—	—
	75 and over	2	—	1	4	—	—
	All ages	**32**	**14**	**26**	**24**	—	—
	Attributed to other causes with mention of alcoholism as contributory.						
	0–	—	2	—	—	—	—
	25–	3	2	4	—	1	—
	35–	8	3	13	5	1	—
	45–	26	9	27	9	—	—
	55–	21	6	17	9	—	—
	65–	17	—	11	11	—	—
	75 and over	6	3	—	—	—	—
	All ages	**81**	**25**	**72**	**34**	**2**	—
13b.	Pulmonary tuberculosis	2	—	—	—	—	—
32b.	Vincents Angina	—	1	—	—	—	—
33b.	Influenza	1	—	—	—	—	—
45–55.	Cancer	—	—	2	—	—	—
59a.	Rheumatoid arthritis	1	—	—	—	—	—
83a.	Cerebral hæmorrhage	3	1	1	—	—	—
93c:1.	Cardiovascular degeneration	1	—	1	—	—	—
93c:3.	Other myocardial degeneration	2	1	2	—	—	—
93d.	Myocarditis (unspecified)	—	1	—	—	—	—
94a.	Diseases of the coronary arteries	2	—	—	—	—	—
95c.	Dilatation of heart	—	1	—	—	—	—
100a.	Varicose ulcer	—	—	1	—	—	—
102.	High blood pressure	1	—	—	—	—	—
106b.	Chronic bronchitis	1	—	2	2	—	—
107.2.	Broncho-pneumonia	—	1	2	1	—	—
108.2.	Lobar pneumonia	3	2	1	1	—	—
109.2.	Pneumonia (unspecified)	—	—	1	—	—	—
110b.	Pleurisy	1	—	—	—	—	—
112.	Asthma	1	—	—	1	—	—
117b.	Ulcer of the duodenum	2	—	—	—	—	—
120a.	Enteritis and diarrhœa	1	1	—	—	—	—
122b.	Intestinal obstruction	1	—	—	—	—	—
124a.	Cirrhosis of the liver	41	10	34	20	—	—
128.	Acute pancreatitis	—	—	1	—	—	—
131c.	Chronic nephritis	—	1	1	—	—	—
132.	Nephritis not stated to be acute or chronic	1	—	—	—	—	—
133a.	Pyelitis	—	—	1	—	—	—
163ba.	Suicide by coal gas	1	—	—	—	—	—
170–171.	Road vehicle accidents	5	—	2	1	—	—
172.	Water transport accidents	—	—	1	—	1	—
178.	Accidental absorption of poisonous gas	—	2	—	—	—	—
179.	Acute accidental poisoning (not by gas)	1	—	1	1	1	—
182.	Accidental mechanical suffocation	3	—	3	2	—	—
183.	Accidental drowning	2	—	2	—	—	—
186.	Accidental injury by fall	3	3	11	5	—	—
190.	Exposure	1	—	—	—	—	—
193.	Accidents due to electric currents	—	—	1	—	—	—
195d.	Brawl	—	—	1	—	—	—
	Total	**113**	**39**	**98**	**58**	**2**	—

The numbers of deaths and the death rates per million from cirrhosis of the liver without mention of alcoholism among civilians since 1939 are as follows :—

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Males											
Number	667	692	567	479	476	427	452	443	480	455	516
Rates	34	38	33	29	29	26	28	24	24	22	25
Females											
Number	388	333	286	277	286	268	263	286	302	292	341
Rates	18	15	13	13	13	12	12	13	14	13	15

The death rate in 1949 was 74 per cent. for males and 83 per cent. for females of what it had been in 1939, whereas for alcoholic cirrhosis in 1949 the rate was 40 per cent. for males and 50 per cent. for females of the 1939 rate. The accompanying figure shows the trend of rates for all deaths due to cirrhosis of the liver and those without mention of alcoholism.

Diagram 6



Death rates per million due to cirrhosis of the liver, all cases, and those without mention of alcoholism, 1938 to 1949.

American experience showed that in the years 1915–20 when Prohibition was effective there was a sharp drop in deaths from cirrhosis, but that from 1920 onwards when illicit supplies were available there was a consistent rise in the death rate. A similar decline in the death rate from cirrhosis of the liver was apparent in this country after 1940 when supplies were restricted, and the death rate from cirrhosis without mention of alcoholism followed this trend very closely. In the absence of any notable change in therapy it may be concluded that a larger proportion of deaths from cirrhosis of the liver is due to alcoholism than appears from the certificates.

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Table CXII.—Deaths from or associated with Alcoholism : Death Rate from the Combined Causes, 1921 to 1949.

	Number of deaths (including non-civilians)										Death rate per million persons† returned as alcoholism or associated therewith
	Alcoholism* 75(1) 77(2)		Returned as connected with alcoholism*								
			Cirrhosis of Liver 124a		Heart diseases 90–95		Violent deaths 163–198		Other causes		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1921	127	55	100	54	41	17	61	11	125	56	17
1922	117	47	103	47	41	14	52	16	125	59	16
1923	104	47	98	54	22	12	46	16	106	57	15
1924	94	33	90	57	36	8	44	7	120	53	14
1925	95	55	87	49	25	19	34	6	90	48	13
1926	76	39	82	50	31	20	36	17	90	58	13
1927	84	24	162	101	40	22	37	14	176	92	19
1928	74	34	210	110	54	34	30	10	205	102	22
1929	85	49	175	83	69	38	41	11	206	75	21
1930	49	45	144	71	46	25	35	10	147	75	16
1931	40	41	162	99	45	35	24	2	136	45	16
1932	61	34	115	62	42	19	18	4	99	45	12
1933	43	30	115	77	52	19	24	10	79	35	12
1934	33	19	125	84	38	22	17	9	97	50	12
1935	50	23	139	62	46	30	17	8	91	57	13
1936	32	27	133	64	48	26	22	4	96	51	12
1937	54	48	135	72	51	29	29	12	62	43	13
1938	44	28	127	65	50	34	25	6	75	27	12
1939	51	29	111	50	52	30	31	12	57	36	11
1940	88	59	127	51	20	13	27	4	36	13	11
1941	77	42	95	46	13	4	30	5	36	11	9
1942	51	18	63	14	7	2	17	2	16	8	5
1943	50	14	49	20	7	2	14	2	22	7	5
1944	44	14	59	9	5	1	21	1	23	4	5
1945	19	8	46	11	4	1	22	3	21	3	3
1946	39	10	37	11	13	—	10	3	19	4	4
1947	40	19	47	13	8	—	15	3	6	6	4
1948	32	14	41	10	5	3	16	5	19	7	4
1949	26	24	34	20	3	—	24	9	13	5	4

* From 1940 onwards deaths from *any* cause certified as " due to alcoholism " are classified to No. 77 or No. 124a; but this was not the case in years prior to 1940.

† Based on deaths of civilian males from 3rd September, 1939, and of civilian females from 1st June, 1941.

(1) International List No. (fourth revision).

(2) International List No. (fifth revision).

International List Numbers for other causes above are identical in fourth and fifth revisions.

Table CXII shows the numbers of deaths from or associated with alcoholism. The final column, which was not affected by the change in classification made in 1940, shows the combined death rate, which has been constant at 4 per million since 1946.

83. Intra-cranial lesions of vascular origin (and 86. Convulsions in children).—Deaths from causes in group 83 numbered 53,899 in 1948 and 59,254 in 1949 compared with 58,248 in 1947 (including non-civilians). Deaths assigned to group 83 are deaths from degenerative disease in persons of whom the majority are elderly. Mortality in such a group is apt to fluctuate from year to year under the influence of disturbances which may strain the physical resources of an infirm population—severe winters or widespread outbreaks of respiratory infection leave their mark on the general mortality of the elderly, not only in mortality from bronchitis or heart disease but naturally in other cause groups such as cerebral hæmorrhage, with which the former conditions may be associated. Allowing for these fluctuations there has been practically no change in the total mortality ascribed to group 83 during the past decade.

Table CXIII.—Cerebral Hæmorrhage, Embolism, Thrombosis and Ill-defined Paralyses : Death Rates by Sex and Age. 1931-35 and each year 1936 to 1949.

Period	Death rate per million living*									C.M.I. All Ages*
	0–	25–	35–	45–	55–	60–	65–	70–	75 and over	
83a. Cerebral Hæmorrhage—MALES										
1931–35	2·7	14	79	402	1,127	2,053	3,930	6,690	11,937	1·148
1936	3·2	11	76	395	1,035	2,020	3,462	6,004	11,254	1·066
1937	1·9	12	79	385	1,067	1,943	3,381	5,931	10,647	1·043
1938	2·3	17	71	386	1,039	1,866	3,312	5,718	9,941	1·000
1939	2·5	20	79	425	1,127	1,969	3,486	5,727	10,102	1·029
1940	4·7	19	79	410	1,135	2,104	3,608	5,682	10,643	1·071
1941	4·7	25	79	375	1,027	1,915	3,326	5,098	9,783	0·981
1942	7·1	27	82	409	952	1,887	3,188	5,000	9,072	0·948
1943	7·9	40	90	375	1,009	1,760	3,179	4,989	8,487	0·922
1944	10·4	34	107	408	1,013	1,866	3,235	4,985	8,639	0·946
1945	7·4	30	96	399	1,011	1,778	3,201	5,004	8,706	0·935
1946	5·6	22	73	383	977	1,816	3,040	5,017	9,007	0·929
1947	8·5	20	78	383	960	1,789	3,021	5,114	9,474	0·947
1948	5·4	25	76	320	899	1,710	2,770	4,445	7,904	0·835
1949	5·2	18	72	376	876	1,731	2,857	4,825	8,426	0·878
83a. Cerebral Hæmorrhage—FEMALES										
1931–35	1·9	15	78	465	1,085	1,937	3,431	5,836	10,815	1·130
1936	1·9	15	86	449	1,112	1,910	3,351	5,401	10,000	1·078
1937	2·6	12	74	448	1,066	1,848	3,193	5,138	9,306	1·032
1938	1·7	12	80	435	1,013	1,881	2'951	5,020	9,162	1·000
1939	2·6	17	77	456	1,140	1,906	3,208	5,237	9,274	1·027
1940	3·3	13	86	506	1,150	1,928	3,379	5,474	9,538	1·083
1941	3·4	20	80	498	1,067	1,865	3,173	4,958	8,909	1·016
1942	6·3	16	85	479	1,088	1,788	3,138	5,085	8,534	0·999
1943	6·9	23	88	482	1,141	1,739	3,005	4,971	8,687	0·998
1944	6·3	20	89	471	1,107	1,825	3,075	4,990	8,456	0·992
1945	5·4	20	85	460	1,001	1,756	3,035	4,904	8,663	0·981
1946	5·3	17	93	488	1,111	1,841	3,038	5,164	9,032	1·026
1947	6·9	22	96	449	1,004	1,832	3,070	5,130	9,494	1·034
1948	4·8	24	80	442	926	1,687	2,762	4,626	8,430	0·935
1949	6·0	18	80	446	982	1,601	2,795	4,891	9,053	0·973
83b, c. Cerebral Embolism, Thrombosis and Softening—MALES										
1931–35	0·7	5	17	90	298	622	1,336	2,528	5,289	0·824
1936	0·6	5	14	106	335	739	1,505	2,832	6,245	0·949
1937	0·6	3	15	96	357	779	1,469	2,931	6,197	0·966
1938	0·4	4	12	93	342	764	1,695	3,111	6,227	1·000
1939	0·4	3	17	106	409	878	1,809	3,420	6,922	1·073
1940	0·9	4	13	105	416	887	1,923	3,530	7,655	1·180
1941	0·8	6	15	105	340	838	1,588	2,964	6,787	1·032
1942	1·1	5	14	96	380	799	1,683	2,977	6,578	1·029
1943	1·0	4	12	90	348	803	1,571	2,963	6,186	0·983
1944	1·2	7	13	98	347	819	1,691	2,753	6,462	1·005
1945	0·8	3	12	92	366	829	1,663	3,088	6,452	1·027
1946	1·9	1	13	86	364	850	1,623	3,073	6,756	1·045
1947	1·8	3	9	100	350	881	1,890	3,559	8,088	1·202
1948	1·0	2	12	71	331	800	1,693	3,299	7,104	1·075
1949	0·8	2	14	80	368	857	1,826	3,732	8,338	1·222

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Table CXIII—*continued.*

Period	Death rate per million living*									C.M.I. All Ages*
	0–	25–	35–	45–	55–	60–	65–	70–	75 and over	
	83b, c. Cerebral Embolism, Thrombosis and Softening—FEMALES									
1931–35	0·4	4	17	90	249	512	1,101	2,082	5,144	0·841
1936	0·6	9	18	108	320	616	1,350	2,586	5,805	0·994
1937	0·3	4	15	96	316	638	1,283	2,553	5,840	0·993
1938	0·7	4	15	84	297	714	1,322	2,463	5,938	1·000
1939	1·1	3	22	115	319	742	1,444	2,794	6,511	1·076
1940	1·3	4	21	118	356	749	1,585	2,970	6,829	1·170
1941	0·3	3	19	110	320	728	1,421	2,686	6,197	1·066
1942	0·8	2	16	99	351	664	1,394	2,610	6,249	1·053
1943	1·8	7	17	108	303	651	1,372	2,456	5,960	1·013
1944	0·8	3	15	99	299	674	1,369	2,575	6,333	1·049
1945	0·6	4	18	100	285	699	1,348	2,707	6,416	1·068
1946	1·2	3	11	95	284	646	1,456	2,776	6,882	1·114
1947	0·3	2	13	94	335	674	1,525	3,137	7,867	1·244
1948	1·3	3	10	97	286	645	1,355	2,845	7,174	1·137
1949	0·5	3	15	83	303	725	1,484	3,212	8,326	1·288
	83d, e. Hemiplegia, paralyses and cerebral effusions of unstated origin—MALES									
1931–35	1·0	0·6	4	17	51	111	230	409	881	1·277
1936–40	0·7	0·9	2	16	48	107	212	411	806	1·063
1941–45	0·7	0·5	2	12	39	86	181	322	644	0·861
1946	0·5	0·4	2	9	39	64	159	275	580	0·749
1947	0·7	0·3	2	13	36	86	144	262	533	0·736
1948	0·3	1·0	2	9	25	78	156	250	496	0·684
1949	0·1	—	1	7	37	65	158	260	519	0·694
	83d, e. Hemiplegia, paralyses and cerebral effusions of unstated origin—FEMALES									
1931–35	0·9	0·9	4	17	52	98	181	355	777	1·383
1936–40	0·7	0·6	4	17	42	84	173	325	688	1·102
1941–45	0·5	0·6	3	13	40	77	148	288	596	0·898
1946	0·5	0·3	1	8	34	62	121	271	539	0·783
1947	0·5	0·9	1	9	28	63	139	241	532	0·770
1948	1·1	—	1	8	22	76	105	219	468	0·688
1949	0·3	—	3	10	24	52	99	224	556	0·732

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification in use from 1940 onwards.

Prior to 1938 rates of mortality from cerebral hæmorrhage (83a) had been falling for both sexes and at all ages (Table CXIII). On the other hand, death rates from cerebral thrombosis or softening (83b, c.) were showing an upward tendency especially at older ages where the contribution of these causes is larger and where also the diagnostic distinction between hæmorrhage and thrombosis or softening is more doubtful; a tendency to certify thrombosis rather than hæmorrhage may have been in operation.

In 1939 and 1940 there were increases in the rates for both hæmorrhage and embolism or thrombosis. At ages above 60 the increases, which may have been due to the initial impact of war conditions upon older people, did not persist and in the period 1941–45 the rates, apart from inevitable fluctuations, tended to decline. At young adult ages there were some increases during the war mainly owing to civilian selection. In infancy the period 1941–45 was marked by an increase in deaths from intracranial lesions; in the Text volume for 1946–47 reasons were given for believing this increase to be only apparent and due to more precise descriptions of the causes of death previously assigned

to convulsions. Such a more precise description was specifically encouraged in the 5th Revision of the International List.

Since 1946 there has been a tendency for all rates up to age 65 to decline and for rates at more advanced ages to remain more stationary, but the picture is confused by the continuous movement in certification practice from "hæmorrhage" to "embolism" and "thrombosis" and by the fact that 1947 and 1949 were generally years of upward fluctuation in mortality.

Table CXIV.—Intra-cranial Vascular Lesions : Death Rates per million living by Sex at Ages 45-64 and 65 and over in Geographical Regions and class of Area, 1949.

Area	45–64		65 and over	
	M.	F.	M.	F.
England and Wales	**1,083**	**1,112**	**9,782**	**10,120**
Regional Summary :				
South East	931	935	8,514	9,074
Greater London	871	843	7,953	8,326
Remainder of South East ..	1,010	1,054	9,084	9,867
North	1,237	1,223	11,229	11,108
North I	1,304	1,347	12,140	11,692
North II	1,264	1,280	10,935	10,831
North III	1,184	1,152	11,500	11,588
North IV	1,238	1,212	10,807	10,734
Midland	1,099	1,182	9,939	10,129
Midland I	1,078	1,187	9,833	10,013
Midland II	1,140	1,172	10,132	10,350
East	972	1,025	9,028	10,756
South West	1,105	1,195	9,738	10,478
Wales	1,141	1,351	9,968	10,730
Wales I	1,125	1,332	9,624	10,556
Wales II	1,183	1,396	10,700	11,057
Density Summary :				
County boroughs*	1,234	1,169	10,487	10,337
Urban districts*	1,154	1,210	10,280	10,880
Rural districts*	939	1,139	9,555	10,249

* Excluding Greater London.

Table CXIV shows the death rates for the whole of group 83 in 1949 for each sex at ages 45–64 and 65 and over in each geographical region and class of area. Expressing the rates per cent. of that for England and Wales the ratios for males 65 and over were : North 115, Wales and Midland 102, South West 100, East 92, South East 87, and for females aged 65 and over the ratios were : North 110, East and Wales 106, South West 104, Midland 100, South East 90.

The rankings at ages 45–64 are similar with one exception—for females 45–64 the rate for Wales was higher than for any other main region and as high as in North II. This exceptional feature was also observed in 1947 (Text 1946–47). Most of the regional variations are probably associated with differing intensities of industrialisation and urbanisation ; expressed per cent. of the England and Wales rate, the rates for men at age 65 and over were : county boroughs 107, urban districts 105, and rural districts 98 ; while at ages 45–64, the dispersion was even greater—114, 107, 87. For females the effect

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of urbanisation was not so pronounced and the greatest excess was in urban districts rather than county boroughs; for ages 65 and over, the ratios to England and Wales were: county boroughs 102, urban districts 108, rural districts 101, and at ages 45–64 the ratios ran 105, 109, 102.

Table CXV.—Disease of Ear and Mastoid: Death Rates by Sex and Age. 1931-35 and each year 1936 to 1949.

	Death rates per million living*								C.M.I.* All Ages
	0–	1–	5–	15–	25–	35–	45–	65 and over	
Males									
1931–35	415	71	63	43	34	30	27	21	1·143
1936	685	88	52	44	29	29	28	27	1·231
1937	699	75	53	31	27	29	26	13	1·116
1938	532	76	41	33	26	24	26	23	1·000
1939	641	50	30	26	20	25	23	22	0·909
1940	525	44	22	26	22	21	23	22	0·796
1941	546	35	20	27	22	24	20	15	0·758
1942	493	37	23	30	32	18	22	17	0·801
1943	599	49	27	33	37	28	20	20	0·952
1944	589	40	22	25	33	23	21	18	0·864
1945	586	34	14	30	25	17	20	10	0·755
1946	539	18	13	25	14	14	13	15	0·611
1947	481	24	11	15	12	14	14	13	0·580
1948	343	14	7	16	10	10	11	7	0·404
1949	272	16	5	11	8	11	12	15	0·366
Females									
1931–35	295	67	57	25	15	15	17	18	1·228
1936	428	69	46	21	14	17	16	16	1·212
1937	461	57	44	15	15	15	16	16	1·149
1938	417	63	38	15	10	12	12	15	1·000
1939	439	42	27	18	12	12	12	17	0·957
1940	342	43	21	10	9	10	12	14	0·769
1941	377	36	17	11	7	10	11	10	0·699
1942	340	25	22	12	7	8	9	14	0·692
1943	387	26	25	13	13	6	10	10	0·773
1944	446	31	21	12	9	6	10	9	0·768
1945	439	22	14	11	9	5	10	8	0·683
1946	416	16	14	10	5	6	7	8	0·589
1947	299	14	12	7	5	7	7	12	0·543
1948	256	23	6	5	3	4	6	11	0·428
1949	146	8	7	5	5	5	6	5	0·314

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification in use from 1940 onwards.

89. Diseases of the Ear and Mastoid Antrum.—There were 599 deaths from this cause in 1948 and 501 in 1949 (including non-civilians). Table CXV shows that mortality from this cause group has been falling rapidly since the war. The C.M.I. for males fell from 1·231 in 1936 to 0·758 in 1941; there followed a short lived war-time rise to 0·952 in 1943 and then a swift decline to 0·366 in 1949. For females there was a similar trend but the war-time rise was less than for males; the C.M.I. in 1949 was 0·314. These causes

made their more appreciable contribution to mortality in the first year of life and in this age group the rate for males in 1949 was only 39 per cent. of that for 1937 the maximal year ; the rate for females had fallen to 32 per cent. of the 1937 rate.

90-95. Heart Disease.—The trend of total mortality from heart diseases of all types except congenital malformations (No. 157 (*c*)) and acute rheumatic heart disease (No. 58 (*a–c*)) is shown in Table CXVI which gives Comparative Mortality Indices by sex from 1901 to 1949, these being shown also in Diagram 7. In 1938 (unit base year for C.M.I.), crude death rates per million at all ages were 2,856 for males and 2,796 for females. It should be understood that the C.M.Is. for the sexes can be compared with each other only in the sense of indicating the trends of mortality in each sex, not their relative levels of mortality. In this sense they indicate that the relative increase in mortality of males during the period has been greater than that of females, viz., for males : from 27 per cent. below 1938 level in 1901 to 7 per cent. above it in 1949 ; compared with for females : from 15 per cent. below in 1901 to 1 per cent. below in 1949. Nevertheless the indices for the two sexes showed a close parallelism, declining slightly during the period from 1901 to about 1921 apart from a peak in 1915, followed by a progressive and rapid rise to a maximum in each sex in 1940. Some of this rapid increase can probably be attributed to the introduction of a revised form of death certificate in 1927, leading to more frequent mention of heart disease as a cause of death. Since 1941 the indices have been somewhat lower, but rose slightly in 1947 and again in 1949, both years of rather high mortality generally.

Table CXVI.—Heart Diseases : Comparative Mortality Indices, Males and Females. 1901 to 1949.

Year	Males	Females	Year	Males	Females
1901	0·730	0·846	1926	0·626	0·727
1902	0·730	0·821	1927	0·682	0·803
1903	0·700	0·784	1928	0·711	0·833
1904	0·715	0·829	1929	0·889	1·038
1905	0·685	0·791	1930	0·827	0·927
1906	0·696	0·770	1931	0·891	0·999
1907	0·710	0·796	1932	0·893	0·983
1908	0·688	0·760	1933	0·918	1·013
1909	0·690	0·774	1934	0·918	0·979
1910	0·651	0·719	1935	0·943	1·001
1911	0·612	0·694	1936	1·028	1·070
1912	0·636	0·730	1937	1·026	1·061
1913	0·660	0·733	1938	1·000	1·000
1914	0·654	0·748	1939	1·076	1·074
1915	0·731	0·801	1940	1·135	1·124
1916	0·697	0·772	1941	1·017	0·973
1917	0·664	0·718	1942	0·956	0·900
1918	0·609	0·654	1943	0·952	0·905
1919	0·620	0·693	1944	0·972	0·890
1920	0·581	0·647	1945	0·963	0·903
1921	0·571	0·663	1946	0·981	0·922
1922	0·622	0·735	1947	1·065	0·960
1923	0·579	0·685	1948	0·963	0·870
1924	0·609	0·718	1949	1·070	0·986
1925	0·638	0·746			

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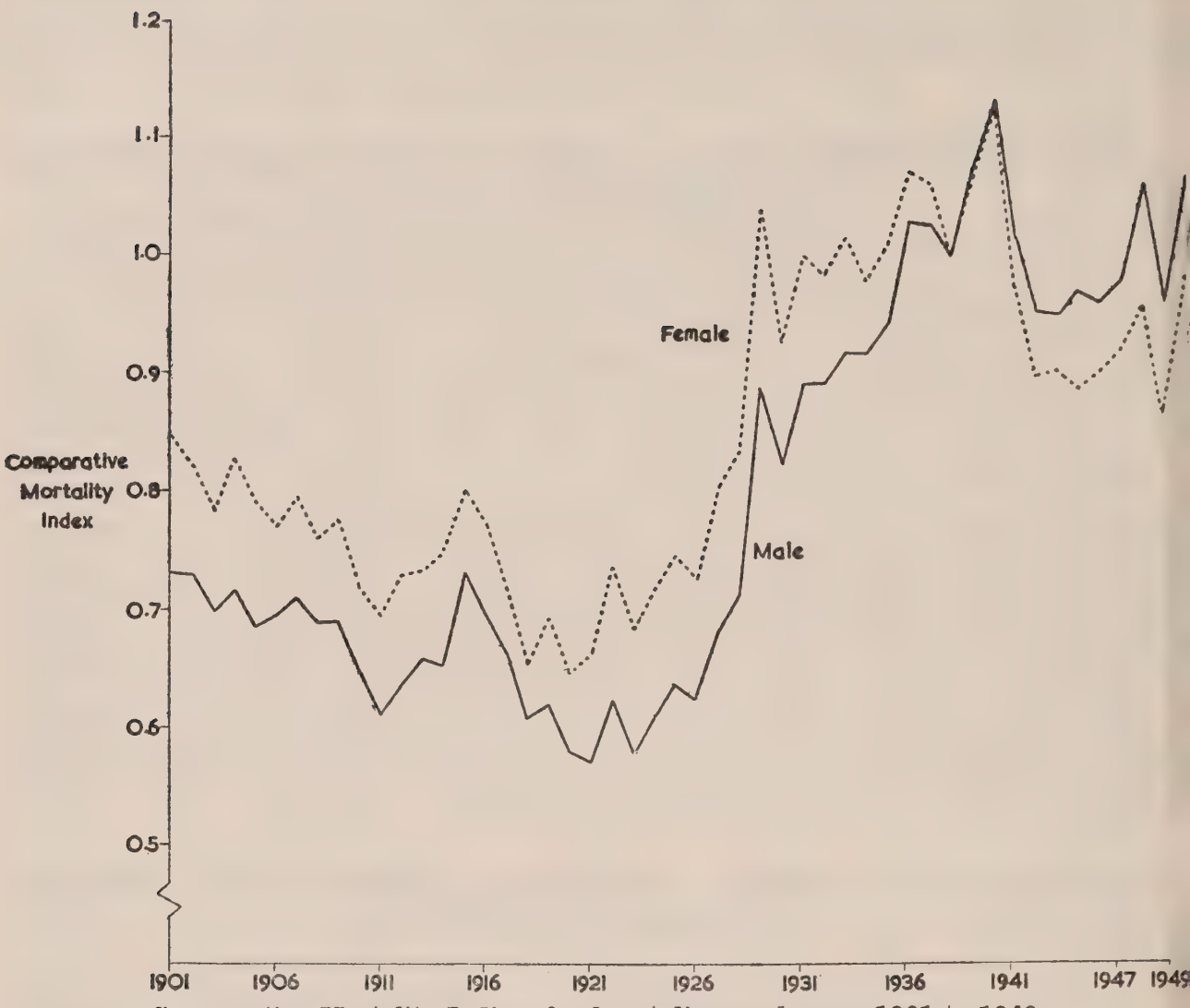
Diagram 7



Comparative Mortality Indices for heart diseases by sex, 1901 to 1949.

The proportionate contributions to mortality of the several components of the group of heart diseases in 1931, 1940, and 1949 were as follows (deaths at all ages) :—

Causes of Death	1931		1940		1949	
	M.	F.	M.	F.	M.	F.
90. Pericarditis	180	107	214	144	194	128
	0·4	*0·2*	*0·3*	*0·2*	*0·3*	*0·2*
91. Acute endocarditis	552	536	480	450	243	210
	1·3	*1·1*	*0·7*	*0·6*	*0·3*	*0·3*
92. Chronic affections of the valves or endocardium.	10,899	13,980	8,385	10,766	5,850	7,946
	25·6	*28·4*	*12·7*	*15·3*	*7·7*	*10·2*
93. Diseases of the myocardium	23,334	28,256	41,694	49,186	40,547	51,836
	54·7	*57·4*	*63·4*	*69·9*	*53·1*	*66·4*
94. Diseases of the coronary arteries, angina pectoris.	4,145	1,820	12,319	6,311	27,555	15,367
	9·7	*3·7*	*18·7*	*9·0*	*36·1*	*19·7*
95. Other diseases of the heart..	3,560	4,511	2,780	3,531	1,874	2,509
	8·3	*9·2*	*4·2*	*5·0*	*2·5*	*3·2*
90–95. Total	**42,670**	**49,210**	**65,872**	**70,388**	**76,263**	**77,996**
	100·0	*100·0*	*100·0*	*100·0*	*100·0*	*100·0*

Between 1931 and 1949 the proportion of deaths in each sex assigned to acute (91) or chronic valvular disease (92) and the residual group (95) diminished by some two-thirds; the proportion assigned to myocardial diseases (93) did not change much, but the proportion in the coronary group (94) increased by three or four times for males and by five times for females.

93c, d; 94; 162a, c. Degenerative Heart Disease and Senility.—Nos. 93c, d of the International List comprise cardiac diseases labelled myocardial degeneration, infarction, sclerosis, other chronic myocarditis, and myocarditis not distinguished as acute or chronic. No. 94 comprises (*a*) diseases of the coronary arteries and (*b*) angina pectoris without mention of coronary disease. 162a, c, comprise deaths assigned to old age or to senility without mention of senile dementia.

The number of deaths of civilians assigned to 94a, coronary disease, increased from 15,483 in 1939 to 35,076 in 1948 and 41,409 in 1949, whereas deaths assigned to 94b, angina pectoris, declined from 2,361 in 1939 to 1,564 in 1948 and to 1,513 in 1949. Corresponding figures for deaths assigned to group 93c : 1 (cardiovascular degeneration or arterio-sclerotic heart disease) were 22,362 in 1939, 28,687 in 1948 and 33,774 in 1949; group 93c : 2 (fatty degeneration), 1,856 in 1939, 610 in 1948, and 679 in 1949; group 93c : 3 (other myocardial degeneration), 47,633 in 1939, 43,841 in 1948 and 50,681 in 1949; group 93d (myocarditis, not distinguished as acute or chronic), 9,670 in 1939, 6,304 in 1948 and 6,577 in 1949. As has been emphasised in previous reviews the diagnosis, description and classification of the so-called degenerative cardiac conditions leaves much to be desired. Though the Sixth Revision of the International List introduces several changes in the classification of these diseases the problem will still require much further study if progress is to be made in resolving the present confusion of terminology and in understanding the meaning of recent trends of mortality ascribed to cardiovascular causes.

Comparison of the crude death rates per million (all ages) in 1931, 1939, 1948 and 1949 is made in the table below :—

		1931	*1939*	*1948*	*1949*
Group 93c, d.	M.	1,216	1,913	1,759	1,957
	F.	1,354	2,034	1,948	2,284
Group 94 ..	M.	216	605	1,161	1,339
	F.	87	275	580	682

The C.M.I. for the whole group 93, diseases of the myocardium, was 0·872 (male) and 0·930 (female) in 1933, and 0·883 and 0·939 in 1949. For group 94, coronary disease and angina pectoris, the C.M.I. increased from 0·620 (male) and 0·559 (female) in 1933 to 2·244 and 2·314 in 1949.

Table CXVII.—Coronary, Arteriosclerotic and Hypertensive Heart Disease, and Myocarditis with arteriosclerosis : Death Rates by Sex and Age in each year 1931 to 1949.

Period	Death rates per million living*									
	0–	25–	35–	45–	50–	55–	60–	65–	70–	75 and over
94. Diseases of Coronary Arteries and Angina Pectoris—MALES										
1931	—	8	55	158	347	578	912	1,373	1,814	2,005
1932	0	6	63	224	398	640	950	1,588	1,998	2,257
1933	0	6	67	252	484	775	1,151	1,763	2,386	2,815
1934	0	7	78	264	518	889	1,313	1,964	2,564	3,138
1935	1	12	81	294	611	970	1,448	2,095	2,974	3,663
1936	0	7	92	316	642	1,088	1,682	2,369	3,269	3,968
1937	—	14	102	332	732	1,165	1,769	2,548	3,549	4,434
1938	1	12	104	364	707	1,265	1,948	2,857	3,849	4,635
1939	0	13	124	417	873	1,515	2,250	3,082	4,301	5,196
1940	1	13	121	443	886	1,486	2,283	3,276	4,337	5,489
1941	0	11	127	428	814	1,434	2,128	3,128	3,924	5,095
1942	0	15	125	442	854	1,473	2,131	3,154	4,122	5,287
1943	1	22	149	469	980	1,618	2,430	3,412	4,294	5,392
1944	1	20	161	554	1,027	1,714	2,676	3,814	4,925	5,847
1945	0	19	168	542	1,045	1,838	2,924	4,066	5,256	6,477
1946	1	24	183	608	1,219	2,110	3,237	4,459	5,729	7,326
1947	1	22	216	724	1,384	2,259	3,622	5,191	6,910	8,647
1948	1	28	218	820	1,393	2,426	3,892	5,437	7,156	9,043
1949	1	28	228	829	1,527	2,757	4,492	6,225	8,639	10,701
94. Diseases of Coronary Arteries and Angina Pectoris—FEMALES										
1931	—	3	10	36	55	136	305	505	751	1,022
1932	—	3	13	30	85	163	330	605	846	1,164
1933	—	3	16	49	97	159	430	663	987	1,370
1934	—	1	20	40	109	234	429	814	1,183	1,617
1935	0	4	20	59	122	250	491	894	1,357	1,859
1936	0	3	18	53	148	269	564	963	1,459	2,032
1937	1	7	19	63	141	287	580	1,084	1,664	2,160
1938	1	5	23	76	149	329	700	1,159	1,764	2,531
1939	1	3	28	76	152	362	752	1,341	1,915	2,923
1940	1	3	30	91	179	387	780	1,343	2,162	2,930
1941	0	7	23	67	172	369	694	1,306	1,892	2,781
1942	0	5	27	77	147	406	735	1,338	1,955	2,912
1943	—	4	25	97	194	377	752	1,532	2,088	3,007
1944	0	5	26	89	202	404	851	1,568	2,254	3,222
1945	0	4	23	99	234	447	893	1,680	2,601	3,392
1946	0	3	28	121	226	480	1,038	1,809	2,892	4,100
1947	0	6	34	116	244	546	1,062	2,005	3,252	4,779
1948	1	5	34	126	265	580	1,324	2,324	3,643	5,281
1949	1	4	32	131	308	674	1,464	2,734	4,294	6,189
93 c:1. Cardiovascular Degeneration—MALES										
1931	—	0	9	46	113	260	781	1,604	3,485	7,855
1932	—	1	7	50	133	324	762	1,838	3,598	8,511
1933	—	1	10	53	147	326	807	1,876	4,020	9,271
1934	—	2	12	63	148	328	844	1,940	4,168	9,081
1935	—	0	13	59	143	364	922	2,000	4,227	9,683
1936	—	1	16	70	191	429	1,059	2,112	4,589	10,929
1937	—	2	14	64	174	386	1,065	2,177	4,618	11,511
1938	0	0	10	64	190	449	1,104	2,231	4,850	11,974
1939	—	2	13	64	196	420	1,105	2,399	5,094	12,979
1940	0	1	13	64	212	510	1,198	2,657	5,002	13,061
1941	0	3	19	62	175	506	1,105	2,379	4,610	12,019
1942	—	3	12	65	158	423	980	2,364	4,402	11,228
1943	0	1	14	53	152	466	949	2,117	4,204	11,460
1944	0	4	10	53	142	423	1,072	2,211	4,489	11,482
1945	—	3	12	54	158	426	1,029	2,242	4,538	11,788
1946	—	1	10	52	157	453	1,084	2,292	4,668	12,946
1947	0	2	13	54	199	463	1,145	2,556	5,174	14,848
1948	0	3	11	51	160	408	1,056	2,308	4,869	12,529
1949	0	2	11	60	155	432	1,136	2,418	5,236	14,480

Table CXVII—*continued.*

Period	Death rates per million living*									
	0–	25–	35–	45–	50–	55–	60–	65–	70–	75 and over
	93 c:1. Cardiovascular Degeneration—FEMALES									
1931	—	1	4	29	75	191	455	931	2,102	5,864
1932	—	0	5	24	73	178	472	1,011	2,303	6,372
1933	0	1	6	25	85	174	486	1,059	2,383	6,876
1934	—	—	5	28	73	205	556	1,181	2,453	6,639
1935	—	1	7	31	103	227	550	1,211	2,783	7,530
1936	0	1	10	34	112	220	598	1,329	3,050	8,342
1937	—	1	13	31	103	230	614	1,447	3,171	8,954
1938	—	2	12	42	132	238	629	1,432	3,231	8,864
1939	—	2	6	35	109	251	699	1,473	3,452	9,877
1940	—	1	9	41	111	279	747	1,687	3,506	10,019
1941	—	2	9	47	113	279	636	1,517	3,229	9,028
1942	—	1	10	41	114	242	602	1,382	3,020	9,022
1943	—	1	9	36	85	225	641	1,344	2,939	9,154
1944	—	1	8	23	101	194	583	1,420	3,095	9,293
1945	—	2	6	38	106	249	610	1,440	3,301	9,757
1946	0	2	10	33	98	252	636	1,535	3,617	10,678
1947	0	0	9	42	104	248	667	1,572	3,912	11,911
1948	0	—	8	25	106	263	638	1,489	3,443	10,553
1949	—	—	7	43	103	265	693	1,643	4,014	12,939

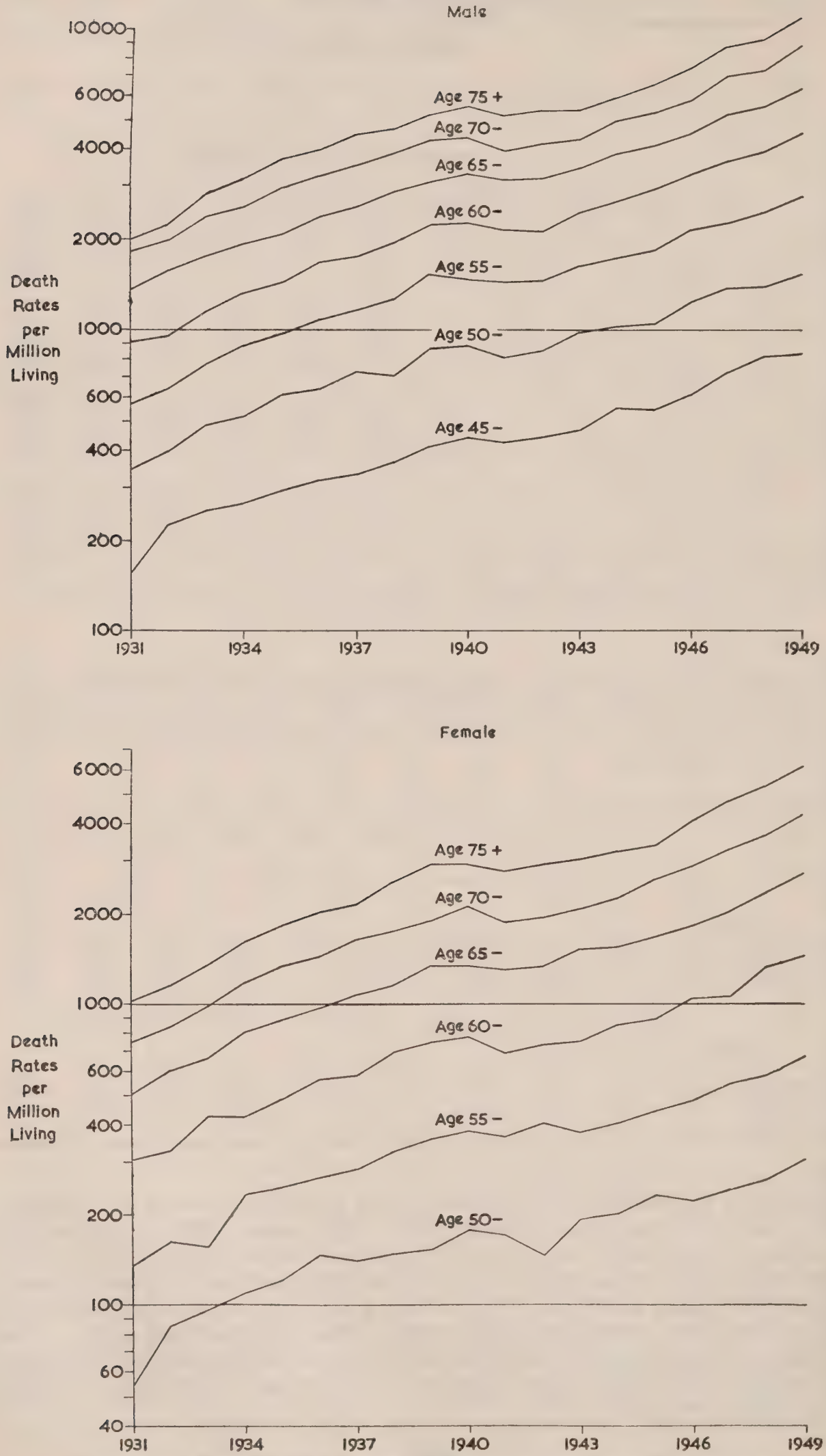
* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification from 1940 onwards.

The trend of death rates at separate ages from groups 94 and 93c : 1 are shown in Table CXVII for years 1931 to 1949. Percentage increases at six year intervals in the rates for coronary disease and angina pectoris are shown in the following table :—

	25–	35–	45–	50–	55–	60–	65–	70–	75 and over
Males									
1931 to 1937	75	85	110	111	102	94	86	96	121
1937 to 1943	57	46	41	34	39	37	34	21	22
1943 to 1949	27	53	77	56	70	85	82	101	98
Females									
1931 to 1937	133	90	75	156	111	90	115	122	111
1937 to 1943	—	32	54	38	31	30	41	25	39
1943 to 1949	0	28	35	59	79	95	78	106	106

There was a remarkable diminution in the annual increments of mortality during the early war years (1940–42), but since about 1943, the annual rate of increase, particularly at advanced ages, has resumed its pre-war trend. There are no signs of slackening yet in the onward progress of coronary disease as a certified cause of death, as is confirmed by Diagram 8 which shows, for each age and sex, practically linear curves drawn to logarithmic scale ; there are almost no discernible differences in the slopes of the curve at each age, but, as the C.M.I. has already suggested, the slope for female rates is slightly steeper than for males.

Diagram 8



Death rates from No. 94 : diseases of coronary arteries, angina pectoris, by sex and age, 1931 to 1949.

The relative importance of myocardial degeneration (93), coronary disease, angina pectoris (94), and other cardiovascular diseases (remainder of 90–103) as reported causes of death at three ages in 1939 and 1949 is compared in the table below :—

	55–64		65–74		75 and over	
	1939	1949	1939	1949	1939	1949
Males						
93..	5,538 *12*	4,141 *9*	13,088 *20*	12,111 *17*	17,253 *28*	23,005 *29*
94..	3,644 *8*	7,223 *16*	4,265 *6*	9,997 *14*	2,098 *3*	6,335 *8*
Remainder 90–103	3,669 *8*	3,266 *7*	5,723 *9*	5,743 *8*	5,624 *9*	6,741 *8*
Other causes ..	34,782 *72*	31,235 *68*	43,085 *65*	45,339 *61*	35,771 *60*	43,721 *55*
Total (all causes)	**47,633** *100*	**45,865** *100*	**66,161** *100*	**73,190** *100*	**60,746** *100*	**79,802** *100*
93/94 ratio ..	1·52	0·57	3·07	1·21	8·22	3·63
Females						
93..	4,700 *13*	3,221 *10*	12,750 *21*	12,486 *19*	24,868 *30*	34,990 *33*
94..	1,246 *3*	2,609 *8*	2,338 *4*	6,207 *10*	1,919 *2*	5,768 *5*
Remainder 90–103	3,304 *9*	3,170 *10*	5,885 *10*	5,926 *9*	7,293 *9*	9,535 *9*
Other causes ..	26,898 *75*	22,934 *72*	38,851 *65*	39,766 *62*	47,765 *59*	56,004 *53*
Total (all causes)	**36,148** *100*	**31,934** *100*	**59,824** *100*	**64,385** *100*	**81,845** *100*	**106,297** *100*
93/94 ratio ..	3·77	1·23	5·45	2·01	12·96	6·07

In each sex the proportion of deaths attributed to myocardial diseases declined between 1939 and 1949 at ages 55–64 and 65–74, but increased at ages 75 and over. On the other hand, in each sex the proportion assigned to the coronary group at least doubled at each age during the ten year period. The ratios of deaths certified from myocardial disease to deaths from coronary disease have therefore undergone drastic reductions. Some additional remarks about death rates for myocardial and coronary disease at adult ages of 50 and over have been made at page 61.

Cardiovascular and cerebral vascular disease in different social classes.—The social class gradient of mortality from heart and circulatory disease has always excited considerable interest particularly in so far as certain sub-groups of

causes show contrasting trends. In the occupational mortality analysis for 1930–32, after allowing for differences in the age composition of the five social classes by the device of the standardised mortality ratio, it was shown that deaths of males assigned to coronary disease, including angina pectoris, were highest in social class I (professional occupations) and lowest in social classes IV and V (unskilled workers). In contrast deaths classified to myocardial or cardiovascular degeneration were lowest in social class I and highest in social class V. A similar contrast was demonstrated between cerebral vascular lesions and arterio-sclerosis. The complete distributions are shown below :—

Social Class	Standardised mortality ratio Males 35–64, 1930–32			
	Coronary disease, angina pectoris	Myocardial disease, cardio-vascular disease	Cerebral vascular lesions (with or without arterio-sclerosis)	Arterio-sclerosis (without cerebral vascular lesion)
I. Professional	237	77	112	100 } 91
II. Intermediate between I and III.	148	92	106	90 }
III. Skilled workers	95	94	101	97
IV. Intermediate between III and V.	66	105	96	99
V. Unskilled workers	67	122	96	119
All males aged 35–64	**100**	**100**	**100**	**100**

Since 1931 there have been many changes in the statistical picture. Coronary disease has been mentioned with ever increasing frequency on medical certificates of cause of death and the consequent increase in the coronary disease death rate though it has been slightly mitigated by recent changes in the method of classifying causes of death, has been, since 1931, five-fold for men and six-fold for women, even after allowance for age changes in the population. The C.M.I. for causes in this group increased for males from 0·466 in 1931 to 2·244 in 1949; and for females from 0·417 in 1931 to 2·314 in 1949. Mortality assigned to myocardial diseases on the other hand increased between 1931 and 1940 to a large extent by virtue of the operation of the rules of selection in joint causes; there was for example increased mention of myocardial degeneration on death certificates in association with bronchitis as a primary cause. Up to 1940 such deaths were automatically allocated to heart disease rather than to respiratory causes. After the abandonment of the rules in 1940 and their supercession by outright acceptance of the underlying cause certified by the medical practitioner, rates tended to decline again. The net change, correcting for both changes in disease classification and in the age constitution of the population, has been an increase of relatively small dimensions. For males the C.M.I. has risen from 0·808 in 1931 to 0·883 in 1949; for females the rise has been from 0·870 to 0·939.

The C.M.I. for males for cerebral vascular lesions has fallen from 1·074 in 1931 to 0·982 in 1949; for females it has risen only slightly from 1·054 to 1·063. Over the same period the C.M.I. for arterio-sclerosis (excluding coronary

or renal sclerosis or cerebral hæmorrhage) has exhibited the following changes : males, a fall from 1·145 to 0·984 ; females, a small rise from 1·097 to 1·156.

In addition to these changes the significance of the social classes may also have changed as a result of economic and occupational adaptations of society, enforced by war and its aftermath. The facts about such changes must await the full analysis of the 1951 Census enumerations. It may however be safely assumed that the occupational constitution of the social classes at least provides a gradient of socio-economic status, the direction of which has not changed even if the actual slope has been disturbed since 1931. On this assumption an indication of the trend in social class differences in mortality can be discerned from a preliminary scrutiny of the current distribution of deaths by social class ; though the actual calculation of occupational group mortality indices cannot be made until the completion of the occupational mortality analyses which will be associated with the census of 1951.

Table CXVIII shows the distribution of deaths of males in social classes from comparable sub-groups of disease over the age range 45–74. Since a full occupational analysis is eventually to be made on the years 1949–53, during four of which the 6th revision of the International List will have been in force, it has been felt advisable to associate the occupational tabulation of 1949 deaths also with rubrics of the 6th Revision List instead of the 5th Revision as used elsewhere in this Review. Hypertensive heart disease (a new grouping) has been added as a sub-group. These percentage distributions for males 45–74 may be compared with the corresponding distributions in 1930–32 in the table below. Changes of statistical classification between the two periods, though considerable, have perforce been ignored because it is not possible to determine to what extent they affect the five social classes differentially.

Percentage distribution of deaths of males aged 45-74, by social class, 1930-32 and 1949.

Social class	Vascular lesions C.N.S.		Arterio-sclerotic heart disease including coronary disease		Other myocardial degeneration		General arterio-sclerosis	
	(*a*)		(*b*)		(*c*)		(*d*)	
	1930–32	1949	1930–32	1949	1930–32	1949	1930–32	1949
I	3	4	8	5	3	3	3	3
II	19	18	29	19	17	15	16	16
III	43	46	40	48	41	43	41	45
IV	17	15	11	13	17	17	18	15
V	17	16	10	14	20	20	21	19
Retired or not gainfully employed	1	1	2	1	2	2	1	2
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

(*a*) Cerebral vascular lesions, 4th Revision, Nos. 82, 97(1), 97(2).
(*b*) Coronary disease, 4th Revision, No. 94.
(*c*) Myocardial disease, 4th Revision, No. 93.
(*d*) Arterio-sclerosis without cerebral vascular lesions, 4th Revision, No. 97(3).

Table CXVIII.—Deaths of males from various diseases of the central nervous and circulatory systems, at ages 45-54, 55-64 and 65-74, and by Social Class, 1949.

Note.—Causes of death classified according to the 6th Revision of the International List.*

Age Group		Social Class†												
		1	2	3a	3b	3c	3d	3e	4a	4b	5a	5b	Retired or not gainfully employed	**All Social Classes**
330–334. Vascular lesions affecting central nervous system														
45–54	Deaths	56	247	27	48	84	7	398	37	151	34	157	14	**1,260**
	Percentage	*4*	*20*	*2*	*4*	*7*	*1*	*31*	*3*	*12*	*3*	*12*	*1*	*100*
55–64	Deaths	157	716	69	140	179	34	1,309	112	401	105	546	37	**3,805**
	Percentage	*4*	*19*	*2*	*4*	*5*	*1*	*33*	*3*	*11*	*3*	*14*	*1*	*100*
65–74	Deaths	352	1,535	382	299	268	61	2,978	424	937	264	1,120	111	**8,731**
	Percentage	*4*	*18*	*4*	*3*	*3*	*1*	*34*	*5*	*11*	*3*	*13*	*1*	*100*
Total Males 45–74	**Deaths**	**565**	**2,498**	**478**	**487**	**531**	**102**	**4,685**	**573**	**1,489**	**403**	**1,823**	**162**	**13,796**
	Percentage	*4*	*18*	*3*	*4*	*4*	*1*	*34*	*4*	*11*	*3*	*13*	*1*	*100*
420. Arterio-sclerotic heart disease including coronary disease														
45–54	Deaths	175	586	73	202	198	13	1,167	65	359	66	369	32	**3,305**
	Percentage	*5*	*18*	*2*	*6*	*6*	*0*	*36*	*2*	*11*	*2*	*11*	*1*	*100*
55–64	Deaths	387	1,506	156	326	487	35	2,665	176	826	172	945	72	**7,753**
	Percentage	*5*	*19*	*2*	*4*	*6*	*0*	*36*	*2*	*11*	*2*	*12*	*1*	*100*
65–74	Deaths	622	2,160	305	383	425	97	3,818	439	984	248	1,264	132	**10,877**
	Percentage	*6*	*20*	*3*	*4*	*4*	*1*	*34*	*4*	*9*	*2*	*12*	*1*	*100*
Total Males 45–74	**Deaths**	**1,184**	**4,252**	**534**	**911**	**1,110**	**145**	**7,650**	**680**	**2,169**	**486**	**2,578**	**236**	**21,935**
	Percentage	*5*	*19*	*2*	*4*	*5*	*1*	*36*	*3*	*10*	*2*	*12*	*1*	*100*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
422. Other myocardial degeneration														
45–54	Deaths	14	99	23	33	25	3	191	15	99	16	118	21	**657**
	Percentage	*2*	*15*	*4*	*5*	*4*	*0*	*30*	*2*	*15*	*2*	*18*	*3*	*100*
55–64	Deaths	67	447	103	114	117	28	965	114	349	121	565	60	**3,050**
	Percentage	*2*	*15*	*3*	*4*	*4*	*1*	*31*	*4*	*11*	*4*	*19*	*2*	*100*
65–74	Deaths	286	1,534	486	314	309	104	3,304	545	1,194	361	1,597	161	**10,195**
	Percentage	*3*	*15*	*5*	*3*	*3*	*1*	*31*	*5*	*12*	*4*	*16*	*2*	*100*
Total Males 45–74	**Deaths**	**367**	**2,080**	**612**	**461**	**451**	**135**	**4,460**	**674**	**1,642**	**498**	**2,280**	**242**	**13,902**
	Percentage	*3*	*15*	*4*	*3*	*3*	*1*	*32*	*5*	*12*	*4*	*16*	*2*	*100*
440–447. Hypertensive disease														
45–54	Deaths	18	78	9	33	32	3	150	13	44	10	53	5	**448**
	Percentage	*4*	*17*	*2*	*7*	*7*	*1*	*34*	*3*	*10*	*2*	*12*	*1*	*100*
55–64	Deaths	55	253	29	60	95	10	448	21	166	40	191	15	**1,383**
	Percentage	*4*	*18*	*2*	*4*	*7*	*1*	*32*	*2*	*12*	*3*	*14*	*1*	*100*
65–74	Deaths	78	412	83	107	110	30	903	101	244	67	343	40	**2,518**
	Percentage	*3*	*16*	*3*	*4*	*4*	*1*	*36*	*4*	*10*	*3*	*14*	*2*	*100*
Total Males 45–74	**Deaths**	**151**	**743**	**121**	**200**	**237**	**43**	**1,501**	**135**	**454**	**117**	**587**	**60**	**4,349**
	Percentage	*3*	*17*	*3*	*5*	*5*	*1*	*36*	*3*	*10*	*3*	*13*	*1*	*100*
450. General arterio-sclerosis														
45–54	Deaths	3	9	3	3	6	1	28	3	6	1	16	—	**79**
	Percentage	*4*	*11*	*4*	*4*	*8*	*1*	*35*	*4*	*8*	*1*	*20*	—	*100*
55–64	Deaths	13	84	6	17	9	2	150	13	36	11	75	12	**428**
	Percentage	*3*	*20*	*1*	*4*	*2*	*0*	*35*	*3*	*8*	*3*	*18*	*3*	*100*
65–74	Deaths	54	239	71	51	52	11	510	84	170	56	244	24	**1,566**
	Percentage	*3*	*15*	*5*	*3*	*3*	*1*	*32*	*5*	*11*	*4*	*16*	*2*	*100*
Total Males 45–74	**Deaths**	**70**	**332**	**80**	**71**	**67**	**14**	**688**	**100**	**212**	**68**	**335**	**36**	**2,073**
	Percentage	*3*	*16*	*4*	*3*	*3*	*1*	*34*	*5*	*10*	*3*	*16*	*2*	*100*

* International Statistical Classification of Diseases, Injuries and Causes of Death, 1948. H.M.S.O. price 30*s*. net.

† For full social class headings see pages 198 and 202.

The distribution of deaths by social class in 1949 differs hardly at all from that of 1930–32 for cerebral vascular lesions, myocardial degeneration (other than coronary disease) or general arterio-sclerosis, but for coronary heart disease there has been a shift of deaths from higher to lower social classes. Assuming that the social class distribution of the population has not altered in shape significantly since 1931 either in total or within individual age groups it appears that the social class gradient of mortality from coronary heart disease, declining in 1930–32 from social class I to social class V, has become less evident in 1949. The similar downward gradient of mortality from cerebral vascular lesions and the contrasting gradients of mortality from myocardial disease and from general arterio-sclerosis (rising from social class I to social class V) seem to have been maintained.

Table CXVIII, in addition to distinguishing the five principal social classes, differentiates between five sub-classes of social class III and two sub-classes of social classes IV and V (as will the occupational analysis for 1949–53). The occupational composition of these sub-classes and the deaths from coronary disease per cent. of deaths from coronary *and* myocardial disease are shown below. (See also Logan, 1952).†

Social Sub-class	Number of deaths from Coronary disease	Number of deaths from Myocardial disease	Coronary disease per cent. of total
IIIa. Mineworkers (all types)	534	612	*47*
IIIb. Transport workers	911	461	*66*
IIIc. Clerical workers	1,110	451	*71*
IIId. Armed Forces	145	135	*52*
IIIe. Others in Social Class III	7,650	4,460	*63*
IVa. Agricultural workers..	680	674	*50*
IVb. Others in Social Class IV	2,169	1,642	*57*
Va. Building and Dock Labourers ..	486	498	*49*
Vb. Others in Social Class V	2,578	2,280	*53*

Within the occupational groupings of Class III the proportion of deaths described as from coronary disease was highest for clerical workers (71 per cent.) and lowest for mineworkers (47 per cent.). Outside Class III, the proportion was also low for agricultural workers (50 per cent.) and for building and dock labourers (49 per cent.). This contrast between clerical workers and workers engaged in heavy manual labour is consistent with suggestions (Stocks 1951, Rentoul 1951)* that sedentary occupation predisposes to the coronary rather than the myocardial type of cardiac disease.

107 and 109. Pneumonia.—The mortality of males from lobar pneumonia in 1949 was precisely one-third of that in 1938, and mortality from broncho pneumonia, other, and unspecified pneumonia was about two-thirds of the rate in 1938. Improvement among females has been a little less (Table CXIX).

† Logan, W. P. D. (1952), Lancet. i. 758.

* Rentoul, E. (1951), Lancet. i. 587.
Stocks, P. (1951), Lancet. i. 351.

Table CXIX.—Lobar and Other Pneumonia : Death Rates by Sex and Age in each year. 1931 to 1949.

Year	Death rates per million living*										C.M.I. All Ages*
	0–	1–	5–	15–	25–	35–	45–	55–	65–	75 and over	
	108. Lobar pneumonia—MALES										
1931	880	275	62	124	170	356	525	705	948	1,229	1·113
1932	890	244	68	124	171	320	482	641	919	1,253	1·055
1933	904	272	65	116	167	341	498	652	799	1,146	1·043
1934	911	280	62	130	179	364	587	721	945	1,264	1·155
1935	912	215	55	103	160	332	533	737	827	1,126	1·056
1936	873	227	53	102	157	310	527	727	868	1,012	1·038
1937	938	245	54	91	159	316	540	759	803	1,075	1·047
1938	832	199	49	108	149	300	515	693	824	1,102	1·000
1939	657	131	26	47	71	148	325	514	678	1,067	0·685
1940	795	131	27	63	86	143	314	560	732	958	0·706
1941	1,014	154	27	58	74	145	297	545	717	1,014	0·703
1942	712	98	19	52	64	135	226	477	647	804	0·592
1943	784	77	19	46	61	129	255	480	656	1,057	0·621
1944	773	62	14	34	68	106	191	405	610	859	0·534
1945	746	51	11	33	54	79	163	349	539	821	0·465
1946	631	55	5	20	28	58	137	354	547	868	0·423
1947	546	60	6	20	24	56	140	349	528	938	0·419
1948	505	35	7	10	21	34	130	283	461	758	0·342
1949	491	30	7	10	16	33	96	272	480	877	0·332
	108. Lobar pneumonia—FEMALES										
1931	717	242	66	76	101	173	206	338	567	965	1·312
1932	671	217	54	68	94	146	194	331	577	1,006	1·245
1933	539	239	52	61	87	160	186	320	514	921	1·184
1934	588	205	56	56	91	145	180	314	584	890	1·178
1935	542	193	48	58	84	141	174	289	534	783	1·096
1936	641	194	45	57	87	122	182	308	510	841	1·108
1937	631	200	41	46	77	133	181	288	513	875	1·093
1938	658	200	38	49	74	125	162	258	456	717	1·000
1939	538	103	27	39	50	70	116	215	372	698	0·748
1940	750	120	23	27	48	69	114	208	413	741	0·787
1941	754	113	18	31	41	68	103	214	412	710	0·764
1942	597	96	17	29	38	56	90	166	305	570	0·620
1943	682	94	18	42	47	59	106	173	375	660	0·719
1944	470	53	15	23	26	46	79	133	281	556	0·533
1945	600	59	9	19	27	37	68	123	274	542	0·511
1946	557	48	10	16	25	37	62	130	274	568	0·503
1947	525	40	9	15	21	27	63	131	267	622	0·501
1948	402	29	5	11	14	23	45	90	217	507	0·379
1949	343	24	5	9	16	26	44	104	269	607	0·425
	107, 109. Broncho- and unspecified pneumonia—MALES										
1931	12,794	2,119	113	73	100	229	433	696	1,640	3,777	1·426
1932	10,635	1,530	97	61	87	192	357	569	1,447	3,631	1 179
1933	10,183	1,638	110	58	97	237	431	671	1,394	3,724	1·229
1934	8,972	1,431	92	57	76	205	390	672	1,391	3,224	1·110
1935	9,050	1,089	65	54	81	172	352	600	1,397	3,211	1·038
1936	9,726	1,218	65	55	72	155	390	705	1,435	3,319	1·143
1937	10,378	1,233	61	43	62	161	410	776	1,494	3,622	1·205
1938	8,643	1,059	70	58	78	173	371	665	1,306	3,202	1·000
1939	7,650	631	46	39	54	123	312	626	1,244	3,393	0·885
1940	10,879	1,103	55	61	92	171	422	896	1,573	4,032	1·184
1941	11,361	908	53	67	85	132	314	727	1,252	3,277	1·022
1942	8,238	522	41	55	75	120	231	547	1,095	2,824	0·800
1943	9,051	551	42	61	72	130	292	622	1,311	3,456	0·935
1944	7,507	410	41	37	83	110	234	509	1,057	2,625	0·762
1945	7,904	386	36	43	67	79	206	527	1,012	2,654	0·748
1946	7,386	304	30	33	39	70	205	511	1,070	2,875	0·712
1947	7,293	325	28	35	33	71	210	537	1,222	3,643	0·799
1948	5,639	229	22	19	22	48	152	432	985	2,922	0·593
1949	5,299	234	16	30	27	58	167	527	1,345	3,948	0·683

Table CXIX—*continued*

Year	Death rates per million living*										C.M.I. All Ages*
	0–	1–	5–	15–	25–	35–	45–	55–	65–	75 and over	
	107, 109. Broncho- and unspecified pneumonia—FEMALES										
1931	9,413	1,815	111	48	86	154	244	494	1,374	3,452	1·530
1932	7,874	1,460	95	51	75	127	202	470	1,208	3,216	1·322
1933	7,556	1,467	98	42	75	153	248	480	1,217	3,358	1·349
1934	7,047	1,272	79	47	63	108	211	415	1,133	2,837	1·182
1935	7,151	997	66	38	63	105	184	401	1,037	2,661	1·099
1936	7,335	1,004	65	32	58	92	191	368	1,079	2,925	1·142
1937	7,154	1,109	57	32	59	123	225	445	1,098	3,116	1·213
1938	6,543	865	64	47	52	97	170	355	890	2,575	1·000
1939	5,869	581	46	35	55	87	148	368	962	3,012	0·965
1940	8,067	918	52	38	61	97	203	448	1,199	3,581	1·234
1941	9,060	817	56	40	55	81	153	341	982	3,251	1·119
1942	6,160	501	36	34	46	74	123	270	744	2,330	0·822
1943	6,890	529	40	36	58	90	144	339	899	3,166	1·013
1944	6,042	395	32	27	41	57	97	224	686	2,184	0·766
1945	6,493	351	28	26	37	57	92	233	711	2,208	0·774
1946	6,097	281	24	21	36	53	108	261	723	2,636	0·792
1947	5,642	286	25	22	24	50	108	268	789	3,176	0·862
1948	4,569	240	15	18	22	39	88	183	598	2,385	0·641
1949	4,242	214	20	17	33	50	92	282	912	3,504	0·805

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification from 1940 onwards.

Except for lobar pneumonia of males, the C.M.I's. were lower in 1948 than in 1949, owing to the absence of influenza in the former year and the occurrence of a small epidemic in the latter year. It has been pointed out on several occasions (e.g., Review, 1946–47, Text, pages 118–120) that mortality certified from pneumonia, without mention of influenza on the certificate, increases during influenza epidemics. This effect is less evident in respect of lobar than of other forms of pneumonia, and applies to elderly much more than to young persons.

Although mortality from pneumonia of all forms was declining slightly during the 1930's the downward trend received a very strong impulse towards the end of that decade with the introduction of sulphonamide drugs effective against pneumococcus. In one year, 1939, the mortality of males from lobar pneumonia declined by one-third. Since then progress has been sustained though at a slower pace. The relative reductions in mortality have been much greater among children and young adults than among infants and elderly persons, as is shown by the following table which expresses rates at different ages in 1948 per cent. of corresponding rates in 1938.

Sex	0–	1–	5–	15–	25–	35–	45–	55–	65–	75 and over
	108. Lobar Pneumonia									
M.	61	18	14	9	14	11	25	41	56	69
F.	61	15	13	22	19	18	28	35	48	71
	107, 109. Broncho and unspecified Pneumonia									
M.	65	22	31	33	28	28	41	65	75	91
F.	70	28	23	38	42	40	52	52	67	93

Table CXX.—Pneumonia : Death Rates per million living in each Region and class of Area by Sex in three Age groups, 1949.

Area	15–44		45–64		65 and over	
	Males	Females	Males	Females	Males	Females
England and Wales	**60**	**52**	**491**	**248**	**2,727**	**2,175**
Regional Summary :						
South East	50	43	499	244	3,241	2,628
Greater London	50	42	560	263	3,825	3,014
Remainder of South East ..	50	43	419	219	2,649	2,219
North	76	58	529	271	2,472	1,903
North I	65	44	433	221	2,210	1,974
North II	75	72	646	256	2,306	1,795
North III	72	59	490	317	2,741	2,060
North IV	83	59	560	265	2,451	1,819
Midland	56	55	539	260	2,716	2,068
Midland I	58	53	581	271	2,887	2,163
Midland II	52	59	460	240	2,405	1,885
East	56	53	382	201	2,495	1,859
South West	56	52	360	205	2,246	2,038
Wales	50	59	312	186	1,896	1,408
Wales I	51	65	315	177	1,929	1,475
Wales II	48	46	305	208	1,825	1,283
Density Summary :						
County boroughs*	72	63	593	300	3,166	2,384
Other urban districts* ..	56	47	443	217	2,123	1,753
Rural districts*	58	50	340	197	2,206	1,753

* Excluding Greater London.

Table CXX gives death rates at three adult ages by regions and density aggregates in 1949. Rates at ages 15–44 and, to a less extent at 45–64, were high in all the North regions, especially North II, whereas, at ages 65 and over, moderate death rates were recorded in the North regions but high rates in Greater London. Rates in Greater London and in the combined North regions expressed per cent. of the national averages are shown in the following table :—

	15–44		45–64		65 and over	
	M.	F.	M.	F.	M.	F.
Greater London	83	81	114	106	140	139
North Regions	127	112	108	109	91	87

114a, 13a. Silicosis.—Table CXXI records deaths and death rates of males from silicosis and other occupational pneumoconioses, since 1939, distinguishing cases with associated tuberculosis (13a). The combined death rate (13a and 114a) at ages 45–64, which had been rising somewhat in recent years, particularly in 1947, underwent a further increase in 1949. At ages 65 and over the rate had been increasing more rapidly and a further large increase occurred in 1948 but a smaller increase in 1949.

At ages 25–44 the increase since 1939 in the number of deaths has been concentrated in those with mention of tuberculosis while at ages 65 and over the increase has been relatively greater in those without mention of tuberculosis.

Table CXXI.—Silicosis and other Occupational Pneumoconioses with and without Tuberculosis : Mortality of Males by Ages in each year, 1939 to 1949.

	Numbers of deaths*								Rate per million living		
	Silicosis, etc., without mention of tuberculosis (114a)				Silicosis with respiratory tuberculosis (13a)				Silicosis with and without tuberculosis (13a and 114a)		
	0–	25–	45–	65 and over	0–	25–	45–	65 and over	25–	45–	65 and over
1939†	—	29	178	48	—	22	84	26	8	61	46
1940	—	37	225	63	—	28	96	23	12	74	53
1941	—	18	179	57	1	29	101	20	10	65	47
1942	—	23	181	50	—	29	92	23	11	63	43
1943	—	31	211	71	—	32	91	30	15	69	57
1944	—	35	230	67	1	31	84	32	17	72	55
1945	—	33	241	108	—	25	112	29	14	80	74
1946	—	36	239	116	2	39	114	39	13	79	82
1947	—	26	265	145	—	37	154	43	10	91	99
1948	—	21	252	154	—	47	162	69	11	88	115
1949	—	28	318	176	—	42	164	56	11	101	118

* Excluding non-civilian males from 3rd September, 1939.

† According to 1940 classification.

115. Diseases of Buccal Cavity ; 121. Appendicitis.—Death rates from these causes since 1931–33 are given in Table CXXII.

The C.M.I. for appendicitis, which has been diminishing equally in each sex in recent years, showed a further decline to less than 0·40 in 1948, that is to say, a reduction of over 60 per cent. since 1938. There was little further change in 1949.

Table CXXII.—Appendicitis and Diseases of the Mouth and Throat : Death Rates by Sex and Age. 1931-33, 1934-36, 1937-39, 1940-42, 1943-45, and 1946 to 1949.

	121. Appendicitis						115. Disease of Buccal cavity, pharynx and tonsils			
	Mean annual death rate per million living*					C.M.I. All Ages*	Mean annual death rate per million living*			
	0–	15–	25–	45–	65 and over		0–	25–	45–	65 and over
Males										
1931–33	80	79	64	138	188	1·091	43	31	60	110
1934–36	81	70	68	121	203	1·070	47	35	65	118
1937–39	74	73	60	113	175	0·972	36	23	40	85
1940–42	62	71	47	76	128	0·739	31	19	24	66
1943–45	53	56	39	64	124	0·628	24	15	17	46
1946	46	40	23	53	111	0·495	16	7	15	39
1947	39	38	24	52	106	0·470	13	6	12	35
1948	30	26	18	41	103	0·379	14	4	10	28
1949	28	28	19	44	101	0·385	7	4	9	28
Females										
1931–33	59	42	40	99	131	1·150	40	29	64	113
1934–36	52	41	39	93	135	1·089	42	30	70	123
1937–39	50	39	34	77	132	0·987	31	20	30	68
1940–42	37	33	25	46	87	0·677	25	13	20	57
1943–45	34	27	23	47	84	0·639	18	11	13	40
1946	27	16	17	38	71	0·499	13	3	8	29
1947	28	14	13	32	78	0·468	10	4	7	32
1948	21	15	9	27	69	0·386	10	5	6	31
1949	21	10	11	26	59	0·363	7	4	8	30

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification in use from 1940 onwards.

117, 118. Ulcer of Stomach and Duodenum, and Gastritis.—Deaths attributed to gastric ulcer, including peptic ulcer, numbered 2,870 in 1948 and 2,882 in 1949, of which, in each year some 2,000 were of males and 800 of females.

The C.M.I. for males continued to decline, from 0·806 in 1947 to 0·769 in 1948 and 0·755 in 1949. For females, the indices were 0·877 in 1947, 0·796 in 1948 and 0·804 in 1949.

Table CXXIII.—Ulcer of the Stomach and Duodenum and Gastritis : Death Rates by Sex and Age in 1931-33, 1934-36, 1937-39, 1940-42, 1943-45, 1946 to 1949.

	Mean annual death rates per million living*									C.M.I. All Ages*
	0–	5–	15–	25–	35–	45–	55–	65–	75 and over	
117a. Ulcer of the stomach										
Males										
1931–33 ..	1	1	12	47	124	256	297	317	297	0·933
1934–36 ..	0	1	9	45	114	268	344	357	377	0·997
1937–39 ..	0	0	9	40	120	259	369	389	433	1·030
1940–42 ..	1	1	8	41	117	248	433	432	431	1·091
1943–45 ..	1	0	10	40	98	213	382	408	377	0·969
1946 ..	—	—	6	24	76	185	346	420	394	0·869
1947 ..	1	—	5	14	64	169	297	416	500	0·806
1948 ..	1	0	5	10	50	158	311	403	457	0·769
1949 ..	—	—	4	10	44	149	296	406	535	0·755
Females										
1931–33 ..	1	1	5	10	31	77	115	154	188	1·173
1934–36 ..	1	0	3	9	25	68	112	168	191	1·137
1937–39 ..	1	0	2	8	19	54	106	159	224	1·030
1940–42 ..	0	0	3	8	20	47	100	165	238	1·025
1943–45 ..	0	0	2	7	13	35	77	138	195	0·811
1946 ..	1	0	2	6	12	33	78	140	202	0·808
1947 ..	1	0	2	3	11	35	77	146	283	0·877
1948 ..	—	—	1	1	9	23	70	156	254	0·796
1949 ..	1	—	2	2	9	26	68	153	253	0·804
117b. Ulcer of the duodenum										
Males										
1931–33 ..	1	0	9	33	73	136	161	179	187	0·978
1934–36 ..	0	0	7	31	64	137	180	180	182	0·981
1937–39 ..	0	0	8	22	66	131	198	211	216	1·008
1940–42 ..	2	0	8	33	80	149	243	255	250	1·204
1943–45 ..	1	0	11	40	86	147	222	253	248	1·189
1946 ..	—	—	7	22	64	137	220	288	271	1·123
1947 ..	3	—	6	22	63	138	228	263	295	1·121
1948 ..	1	—	4	20	58	123	207	302	303	1·081
1949 ..	—	1	5	17	53	137	229	320	358	1·157
Females										
1931–33 ..	0	0	1	5	7	16	24	34	54	0·989
1934–36 ..	1	—	1	3	9	19	27	40	48	1·083
1937–39 ..	0	—	1	1	9	13	27	48	52	1·027
1940–42 ..	0	—	2	3	7	15	26	43	54	1·024
1943–45 ..	0	0	2	3	8	16	26	41	58	1·030
1946 ..	—	—	—	1	6	12	18	40	67	0·852
1947 ..	—	—	1	2	5	10	18	51	75	0·946
1948 ..	—	0	1	2	6	16	24	40	76	1·027
1949 ..	—	0	1	2	5	14	28	51	83	1·121

Table CXXIII.—*continued*

	Mean annual death rates per million living*									C.M.I. All Ages*
	0–	5–	15–	25–	35–	45–	55–	65–	75 and over	
	118 : 1. Inflammation of the stomach									
Males										
1931–33 ..	103	4	2	3	5	14	34	90	288	1·693
1934–36 ..	72	2	1	2	3	12	24	62	194	1·176
1937–39 ..	55	1	1	1	4	11	20	51	160	0·956
1940–42 ..	58	2	0	1	4	6	16	34	116	0·791
1943–45 ..	39	1	0	2	2	6	12	26	73	0·556
1946 ..	25	1	1	1	1	6	14	16	62	0·435
1947 ..	28	—	1	1	1	4	5	15	42	0·338
1948 ..	14	0	0	1	1	3	3	14	37	0·238
1949 ..	8	—	1	0	1	4	3	12	42	0·212
Females										
1931–33 ..	89	4	1	2	5	9	29	105	372	1·880
1934–36 ..	64	2	0	1	3	8	22	71	269	1·344
1937–39 ..	40	1	1	1	2	6	14	52	185	0·917
1940–42 ..	39	1	1	1	3	4	10	36	138	0·733
1943–45 ..	29	1	0	1	0	3	5	29	102	0·520
1946 ..	19	—	0	1	1	2	5	22	92	0·419
1947 ..	22	—	1	1	0	0	9	14	63	0·349
1948 ..	10	1	0	1	1	1	4	17	78	0·331
1949 ..	7	0	0	0	1	1	4	18	68	0·291

* Excluding non-civilian males from the 3rd September, 1939, and non-civilian females from the 1st June, 1941.

Rates for 1931–1939 conform with the method of classification in use from 1940 onwards.

For males the death rate from gastric ulcer at ages under 55 has been declining progressively since 1931–33 (Table CXXIII). Rates at 55–64 rose to a maximum in 1940–42 and have since been falling. At 65–74 the tendency has been similar but the decline much less. At 75 and over, rates have increased fairly steadily from 1931–33 to 1949. Female rates have shown the same general tendency, the main difference being that at ages 55–64 the rates declined throughout the period. In each sex there has thus been some transfer of mortality from younger to older ages.

Deaths attributed to duodenal ulcer numbered 1,882 in 1948 and 2,047 in 1949, of which 279 in 1948 and 310 in 1949, i.e., less than one-sixth in each year, were of females. The C.M.I. for males, 1·121 in 1947, fell slightly to 1·081 in 1948, but rose again to 1·157 in 1949. Corresponding indices for females were 0·946, 1·027 and 1·121. In each sex, therefore, the mortality recorded in 1948 and 1949 was higher than in 1938.

As the rates at ages show (Table CXXIII), mortality has declined in each sex at ages under 45, remained stationary at 45–54, but has been rising at later ages, the rate of increase becoming greater with advancing age. As for gastric ulcer there has been a transfer of mortality from younger to older adult ages.

The following table, expressing rates in 1931–33 and in 1949 per cent. of rates in 1940–42, contrasts the trends of mortality at different ages from gastric and duodenal ulcer.

		35–	45–	55–	65–	75 and over
				Gastric ulcer		
Male	1931–33	106	103	69	73	69
	1940–42	*100*	*100*	*100*	*100*	*100*
	1949	38	60	68	94	124
Female ..	1931–33	155	164	115	93	79
	1940–42	*100*	*100*	*100*	*100*	*100*
	1949	45	55	68	93	106
				Duodenal ulcer		
Male	1931–33	91	91	66	70	75
	1940–42	*100*	*100*	*100*	*100*	*100*
	1949	66	92	94	125	143
Female ..	1931–33	100	107	92	79	100
	1940–42	*100*	*100*	*100*	*100*	*100*
	1949	71	93	108	119	154

Regional death rates in 1949 at two age groups are given in Table CXXIV. High death rates from gastric and duodenal ulcer were recorded in Greater London at ages 65 and over. Much lower death rates were recorded in rural than in urban districts, particularly for males, but to some extent also for females.

Table CXXIV.—Ulcer of Stomach and Duodenum : Death Rates per million living in each Region and class of Area by Sex at Ages 45-64, and over 65, 1949.

Area	Ulcer of Stomach				Ulcer of duodenum			
	45–64		65 and over		45–64		65 and over	
	Males	Females	Males	Females	Males	Females	Males	Females
England and Wales	212	45	445	187	176	21	332	61
Regional summary :								
South East	233	43	528	227	172	22	385	81
Greater London	254	43	595	249	184	21	426	95
Remainder of South East	207	44	459	204	155	22	342	67
North	174	43	378	154	184	22	318	50
North I	178	37	350	111	186	26	400	26
North II	188	49	290	108	215	12	339	36
North III	140	28	392	139	194	32	335	69
North IV	190	51	400	183	172	18	273	50
Midland	229	45	468	166	182	15	327	57
Midland I	246	48	466	143	182	16	326	56
Midland II	197	42	471	210	180	15	531	57
East	189	50	376	163	161	29	284	67
South West	209	39	405	203	174	19	214	38
Wales	248	68	360	158	154	16	288	26
Wales I	236	71	376	192	167	13	294	30
Wales II	280	63	325	94	122	21	275	19
Density Summary :								
County boroughs*	216	46	498	178	189	25	354	65
Other urban districts*	215	47	394	177	184	21	330	47
Rural districts*	156	42	335	155	134	11	232	50

* Excluding Greater London.

119, and 120. Enteritis and Diarrhœa.—As has been shown in Table XVI (page 32), infant mortality from this cause in years 1945 to 1947, 5·1, 4·4, 5·1 per 1,000 related live births, declined abruptly to 2·9 and 2·6 in 1948 and 1949, the relative reduction in deaths in the neonatal period being greater still.

The trend of death rates at other ages is given in Table CXXV. The C.M.I. for males improved from 0·972 in 1947 to 0·548 in 1948 with a further reduction to 0·478 in 1949. The female index behaved similarly. The reduction in mortality from this cause has, since 1940–42, been general to all sex age groups.

Table CXXV.—Enteritis and Diarrhœa : Death Rates by Sex and Age. 1931-33, 1934-36, 1937-39, 1940-42, 1943-45, and 1946 to 1949.

	Mean annual death rates per million living*									C.M.I. All Ages*
	0-	5-	15-	25-	35-	45-	55-	65-	75 and over	
Males										
1931–33 ..	1,679	15	8	14	17	34	53	122	385	1·117
1934–36 ..	1,472	10	10	15	19	33	54	105	362	0·998
1937–39 ..	1,401	10	11	18	20	31	63	106	306	0·962
1940–42 ..	1,311	10	11	22	22	27	62	111	298	0·919
1943–45 ..	1,422	7	9	20	20	28	46	93	270	0·945
1946 ..	1,256	4	9	11	18	27	45	102	326	0·856
1947 ..	1,588	4	6	9	17	19	29	55	209	0·972
1948 ..	786	2	6	8	18	20	36	69	183	0·548
1949 ..	663	3	8	9	14	18	42	65	142	0·478
Females										
1931–33 ..	1,204	18	14	24	26	37	59	129	409	1·158
1934–36 ..	1,066	14	16	26	32	36	54	112	347	1·048
1937–39 ..	985	10	14	27	29	32	55	100	320	0·971
1940–42 ..	932	10	16	25	27	33	52	99	288	0·928
1943–45 ..	1,040	7	15	23	25	31	41	93	310	0·972
1946 ..	892	4	13	19	23	32	46	101	293	0·871
1947 ..	1,149	3	10	16	20	22	38	62	220	0·953
1948 ..	560	5	9	17	21	21	30	65	206	0·577
1949 ..	480	5	7	15	16	20	40	84	194	0·533

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification in use from 1940 onwards.

130-132. Nephritis.—This title includes 130. acute nephritis, 131a. chronic nephritis secondary to acute, 131b. arterio-sclerotic kidney, 131c. chronic nephritis not otherwise specified, and 132. nephritis not stated to be acute or chronic (over ten years of age).

Deaths attributed to all forms of nephritis numbered 11,080 in 1948 and 11,173 in 1949, compared with 12,639 in 1947 and 17,046 in 1937. The C.M.I. continued its steadily downward trend in each sex, attaining levels of 0·604 for males and 0·599 for females in 1949, a reduction of 40 per cent. since 1938.

Table CXXVI.—Nephritis : Death Rates by Sex and Age, 1931-49.

	Death rates per million living*								C.M.I. All Ages*
	0–	15–	25–	35–	45–	55–	65–	75 and over	
130. Acute nephritis									
Males									
1931–33 ..	24·0	23·9	18·9	20·2	41·8	43·7	75·0	95·8	1·177
1934–36 ..	24·5	23·4	21·3	21·5	33·9	43·4	65·9	86·6	1·140
1937–39 ..	19·8	19·7	18·0	21·3	30·3	35·4	54·3	65·5	0·964
1940–42 ..	19·7	20·3	23·7	19·1	26·7	39·2	49·5	61·2	0·968
1943–45 ..	18·3	23·3	21·0	19·0	24·2	31·5	32·6	55·1	0·856
1946 ..	16·5	12·3	15·0	11·8	22·0	30·6	31·9	54·1	0·696
1947 ..	16·1	12·4	11·8	10·7	16·3	28·0	39·7	38·5	0·643
1948 ..	9·7	12·3	10·5	10·9	16·9	28·7	27·7	38·3	0·557
1949 ..	10·3	9·1	7·7	8·1	17·9	18·3	26·9	42·2	0·479
Females									
1931–33 ..	24·1	22·0	15·0	23·4	34·9	51·5	61·4	70·5	1·316
1934–36 ..	21·6	19·6	17·7	22·0	29·1	43·6	62·5	66·2	1·218
1937–39 ..	17·6	14·4	13·8	19·2	27·0	37·8	47·0	63·9	1·015
1940–42 ..	16·6	12·2	13·0	14·8	20·0	28·7	44·7	45·2	0·845
1943–45 ..	15·7	13·5	12·5	10·9	17·2	21·6	30·3	30·4	0·703
1946 ..	10·0	11·3	9·1	12·9	12·6	20·6	23·3	28·5	0·571
1947 ..	10·5	9·5	6·6	9·1	14·1	13·5	33·0	31·3	0·535
1948 ..	9·6	9·9	9·1	8·5	9·3	11·3	24·0	37·5	0·486
1949 ..	9·9	10·3	8·0	7·6	8·5	12·4	15·4	17·2	0·423
131b. Arterio-sclerotic kidney									
Males									
1940 ..	1·8	10·6	19·8	49·6	156·4	435·7	1,066·1	2,826·4	
1941 ..	1·2	8·4	23·6	48·8	145·2	401·8	1 001·6	2,437·4	
1942 ..	1·4	10·0	33·5	52·4	144·7	386·3	883·9	2,178·3	
1943 ..	1·1	9·5	34·8	46·3	147·2	349·6	759·5	2,180·1	
1944 ..	1·1	11·4	43·8	47·8	132·2	308·6	760·1	2,032·3	
1945 ..	0·7	8·7	33·7	43·9	138·6	334·5	742·9	1,950·0	
1946 ..	1·3	12·3	19·8	38·8	138·3	320·8	797·6	2,244·4	
1947 ..	1·1	8·7	18·1	40·5	123·3	332·3	803·5	2,415·8	
1948 ..	0·8	7·5	16·8	37·1	115·2	298·5	711·4	1,935·7	
1949 ..	1·0	8·3	18·8	42·9	108·8	250·2	681·0	2,094·6	
Females									
1940 ..	1·6	2·1	14·1	51·2	124·5	343·9	810·7	1,815·2	
1941 ..	0·9	9·1	17·6	41·4	116·1	294·0	696·7	1,584·9	
1942 ..	1·2	5·9	16·6	41·9	121·1	245·6	619·8	1,445·1	
1943 ..	0·9	6·4	19·8	49·2	110·9	240·1	591·2	1,348·3	
1944 ..	2·3	5·6	19·2	41·9	99·2	222·3	584·6	1,365·0	
1945 ..	1·4	9·2	20·9	40·4	95·9	211·6	573·2	1,385·9	
1946 ..	1·9	6·9	17·9	38·2	100·1	213·4	591·6	1,429·3	
1947 ..	1·1	8·5	14·2	43·4	103·6	231·2	563·0	1,589·8	
1948 ..	1·1	6·8	12·5	36·3	80·4	191·5	481·0	1,295·8	
1949 ..	2·4	8·6	14·4	36·5	83·6	192·4	500·0	1,432·4	
131a, c, 132. Other chronic and unspecified nephritis									
Males									
1940 ..	8·4	47·6	69·8	96·2	178·2	363·7	728·3	1,660·1	
1941 ..	6·5	66·7	97·2	98·8	179·4	340·1	708·5	1,508·3	
1942 ..	6·7	58·7	85·6	84·9	165·4	294·3	645·5	1,523·7	
1943 ..	6·6	77·7	106·1	80·9	134·9	292·3	573·3	1,370·8	
1944 ..	7·7	60·5	104·7	96·8	123·3	287·0	566·8	1,258·1	
1945 ..	7·4	62·5	99·0	75·5	135·7	260·8	572·9	1,205·8	
1946 ..	6·7	42·1	66·2	65·6	126·7	253·5	478·9	1,231·3	
1947 ..	6·9	36·8	51·2	61·1	115·5	220·4	473·1	1,157·5	
1948 ..	9·7	32·6	45·1	64·9	103·9	195·0	372·4	899·1	
1949 ..	7·2	33·7	45·9	59·7	79·6	167·3	396·8	1,027·0	
Females									
1940 ..	7·9	36·9	54·6	100·6	160·4	305·7	604·0	1,022·4	
1941 ..	9·5	36·0	63·5	80·1	144·8	277·0	534·5	856·3	
1942 ..	8·8	27·2	55·0	71·9	133·1	235·5	501·0	912·4	
1943 ..	6·6	33·1	54·3	76·9	124·5	228·1	476·4	869·4	
1944 ..	9·4	33·8	57·4	73·4	111·6	221·9	464·5	818·8	
1945 ..	7·4	29·3	41·5	60·1	103·8	241·7	407·3	746·4	
1946 ..	10·2	30·4	45·4	62·3	103·2	201·1	409·0	787·2	
1947 ..	8·3	31·5	42·9	60·4	95·5	176·8	340·7	775·2	
1948 ..	8·5	29·7	37·4	57·0	74·4	151·8	322·3	622·5	
1949 ..	7·3	22·4	31·4	42·6	78·3	140·6	310·0	648·1	

* Excluding non-civilian males from 3rd September, 1939, and non-civilian females from 1st June, 1941. Rates for 1931–39 conform with the method of classification in use from 1940 onwards.

The C.M.I. for acute nephritis (Table CXXVI) has declined even more rapidly, to 0·479 in 1949 for males and 0·423 for females. There has thus been a reduction in mortality from this cause of well over 50 per cent. since 1938 and, as the death rates by sex and age show, all groups have participated in this improvement. The death rates from the conditions classified as arteriosclerotic kidney continued to decline at higher ages but there were no changes of note at ages under 45. Death rates from other chronic and unspecified nephritis continued to improve at each age.

Table CXXVII.—Nephritis : Death Rates per million living by Sex at Ages 45-64 and 65 and over in Regions and class of Area, 1949.

Area	45–64		65 and over	
	Males	Females	Males	Females
England and Wales	**304**	**249**	**1,724**	**1,257**
Regional Summary :				
South East	263	197	1,562	1,061
Greater London	246	174	1,260	913
Remainder of South East ..	286	226	1,868	1,217
North	344	290	1,672	1,342
North I	259	266	1,550	1,231
North II	382	402	1,887	2,048
North III	373	283	1,709	1,282
North IV	348	280	1,647	1,259
Midland	284	259	1,664	1,336
Midland I	278	260	1,615	1,355
Midland II	297	258	1,752	1,299
East	189	264	1,780	1,178
South West	380	266	2,317	1,555
Wales	399	283	2,360	1,579
Wales I	389	292	2,188	1,566
Wales II	427	260	2,725	1,604
Density Summary :				
County boroughs*	312	259	1,661	1,287
Urban districts*	341	280	1,941	1,380
Rural districts*	288	258	1,843	1,339

* Excluding Greater London

The regional distribution of mortality from all forms of nephritis at ages 45–64 and 65 and over in 1949 is given in Table CXXVII. Rates at ages 45–64 were well above the national average in Wales and in the Northern regions. At ages 65 and over Wales II and the South West regions gave high rates for males, but for females the rates for these areas were exceeded in the North II region. In each sex age group higher rates were recorded in the urban districts than in the county boroughs or rural districts.

137. Diseases of the Prostate.—Deaths assigned to 137a, hypertrophy, numbered 4,764 in 1948 and 4,951 in 1949 compared with 4,976 in 1947, 5,389 in 1943 and 4,914 in 1939. Deaths from other diseases of the prostate, excluding cancer, numbered 106 in 1948 and 113 in 1949, compared with 182 in 1943 and 169 in 1939.

The C.M.I. for the combined group (Table CXXVIII) was 0·795 in 1948 and 0·808 in 1949, thus continuing the improvement that has been recorded since 1940. The slight increase in 1949 over 1948 was mainly confined to ages 75 and over. At ages 60–74 death rates were lower in 1949 than the previous year.

Table CXXVIII.—Diseases of the Prostate : Death Rates according to Age in each year 1931 to 1949.

Year	Death rates per million males living*								C.M.I. All Ages*
	25–	45–	50–	55–	60–	65–	70–	75 and over	
1931 ..	1·2	11	54	184	476	1,245	2,394	5,521	1·028
1932 ..	1·6	10	47	169	476	1,312	2,493	5,912	1·075
1933 ..	1·7	13	49	168	520	1,332	2,604	5,812	1·090
1934 ..	1·5	10	45	175	555	1,224	2,689	5,641	1·075
1935 ..	1·8	13	53	162	519	1,206	2,577	6,062	1·090
1936 ..	2·2	7	49	182	512	1,192	2,450	5,917	1·064
1937 ..	2·1	10	42	173	499	1,126	2,575	5,706	1·044
1938 ..	1·5	11	35	152	435	1,134	2,305	5,704	1·000
1939 ..	1·8	6	30	180	483	1,132	2,399	5,867	1·037
1940 ..	1·4	13	46	157	526	1,265	2,571	6,418	1·127
1941 ..	1·8	7	45	150	504	1,255	2,612	6,097	1·098
1942 ..	0·7	8	54	165	456	1,220	2,282	5,962	1·044
1943 ..	1·7	7	37	156	459	1,188	2,478	5,718	1·035
1944 ..	2·3	9	42	148	447	1,159	2,366	5,353	0·986
1945 ..	0·5	6	37	128	440	1,096	2,213	5,196	0·940
1946 ..	0·5	5	38	133	421	956	2,075	5,196	0·906
1947 ..	0·3	5	25	91	358	863	1,976	5,214	0·862
1948 ..	0·8	4	23	100	342	817	1,815	4,683	0·795
1949 ..	0·5	5	18	87	333	784	1,774	4,993	0·808

* Excluding non-civilians from 3rd September, 1939. Rates for 1931 to 1939 conform with the method of classification in use from 1940 onwards.

140-150. Maternal Mortality.—Though the birth rates were higher in 1948 and 1949 than in 1931–35, the deaths in those years from causes attributed to pregnancy and childbearing were 809 and 727 compared with an annual average of 2,719 in 1931–35. It is generally accepted that this dramatic reduction has been due to the progressive introduction of sulphonamides and antibiotics in conjunction with raised standards of asepsis and obstetric technique and more widespread and improved antenatal medical care.

Table CXXIX shows numbers of deaths classed to maternal causes excluding abortion, together with the numbers of deaths resulting from other conditions but associated with pregnancy or childbearing. These deaths may be related approximately to the recorded live and still births shown in the bottom line of the table. The effect of higher fertility in 1946 was to interrupt the reduction in maternal deaths though the actual risk (per 1,000 births) fell. The fall in the numbers of deaths was resumed in 1947. Likewise the younger age of war-time and post-war spinster brides was followed by a steep rise in first maternities under 25, especially in 1947, and this was large enough, in 1947 only, to produce a rise in the number of maternal deaths under age 25 though deaths in other age groups declined. Deaths from other causes associated with pregnancy and childbearing (excluding abortion) have followed a similar trend, though fluctuations arising from the smaller numbers tend to produce more irregularity in the movement.

Table CXXIX.—Deaths, including those of non-civilians, attributed to and associated with all Maternal causes, excluding Abortion, in each year 1940 to 1949.

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Total deaths classed to Nos. 142–50 :—										
Single	70	*78	85	85	61	70	59	43	34	28
Married	1,298	1,257	1,262	1,193	1,101	943	979	868	640	579
Widowed	4	18	13	18	13	15	10	7	12	6
All Women	**1,372**	**1,353**	**1,360**	**1,296**	**1,175**	**1,028**	**1,048**	**918**	**686**	**613**
Ages 15–	46	*39	41	27	24	22	20	21	19	11
20–	213	200	211	185	191	157	128	158	112	86
25–	350	340	334	305	228	204	235	184	165	157
30–	355	334	352	349	333	252	298	259	161	134
35–	263	285	273	274	268	255	241	195	151	140
40–	122	140	122	123	112	119	100	89	61	72
45–	23	15	27	33	19	19	26	12	17	13
Total deaths not classed to 142–50, but associated with a condition therein :—										
Single	18	18	18	23	24	29	16	12	16	7
Married	344	336	341	409	350	307	333	249	211	148
Widowed	6	4	4	5	9	6	4	2	4	2
All Women	**368**	**358**	**363**	**437**	**383**	**342**	**353**	**263**	**231**	**157**
Ages 15–	14	15	10	11	6	2	4	5	2	3
20–	46	61	65	62	66	54	45	39	38	24
25–	89	81	101	101	80	71	76	69	65	38
30–	93	94	83	123	99	90	100	64	52	43
35–	86	57	70	92	89	85	73	57	47	29
40–	35	47	32	41	39	34	51	27	24	17
45–	5	3	2	7	4	6	4	2	3	3
Number of live and still births	612,899	599,967	673,886	705,596	772,784	699,270	843,634	902,821	793,705	747,465

* Including 1 death at 10–14 years.

Table CXXX.—Deaths, including those of non-civilians, attributed to or associated with Abortion : 1928 to 1949.

Year	Spontaneous therapeutic or unstated		Induced non-therapeutic (criminal)		Total attributed to abortion (including criminal)	Others associated with abortion	**Total attributed to or associated with abortion**
	With sepsis	Without sepsis	With sepsis	Without sepsis			
1928	224	147	57		428	83	**511**
1929	238	140	67		445	182*	**627**
1930	300	147	67		514	77	**591**
1931	229	140	52	27	448	77	**525**
1932	262	139	46	23	470	90	**560**
1933	257	144	56	29	486	97	**583**
1934	295	118	67	33	513	64	**577**
1935	262	108	64	30	464	74	**538**
1936	242	105	49	24	420	70	**490**
1937	176	109	56	28	369	104	**473**
1938	173	101	54	26	354	81	**435**
1939	167	79	80	28	354	49	**403**
1940	116	76	43	33	268	56	**324**
1941	145	90	66	24	325	47	**372**
1942	175	62	64	12	313	49	**362**
1943	167	64	76	15	322	57	**379**
1944	170	63	75	7	315	52	**367**
1945	110	50	65	9	234	19	**253**
1946	69	42	41	5	157	37	**194**
1947	53	48	36	3	140	44	**184**
1948	53	32	34	4	123	16	**139**
1949	53	34	25	2	114	19	**133**

* The excessive number of deaths associated with abortion but not classed to it in 1929 was due partly to the influenza epidemic of that year and partly to the allocation to abortion rather than to childbirth, for that year only, of 63 deaths said to be associated with premature delivery without definition as to length of gestation.

Table CXXX shows numbers of deaths attributed to and associated with abortion from 1928 to 1949. There was no significant decrease in the total number of deaths prior to 1936 but thereafter the effect of new methods of treatment became noticeable. Notwithstanding the failure of the deaths from non-septic causes to show any reduction, the decline in deaths from sepsis produced, up to 1939, a substantial fall in the total deaths—from 538 in 1935 to 403 in 1939. The difficulties and effects of war interrupted the decline in post-abortive sepsis but deaths from non-septic causes diminished. Leaving out of account the abortions known to have been induced for non-therapeutic reasons (just over one-quarter of the total) with their usually higher sepsis risk there were 427 deaths attributed to spontaneous or therapeutic abortion in 1940–41, and 61 per cent. of these were septic. As a result of the differential trend (of septic and non-septic causes) the percentage with sepsis rose to 73 in 1943–44. After 1944 the decline in sepsis was the more rapid and in 1948–49 the percentage with sepsis was 62. It will, however, be noticed that among these deaths from therapeutic or spontaneous abortion the number of cases with sepsis has been stationary since 1947. Among deaths from induced non-therapeutic abortion those with mention of sepsis have continued to decline ; in this group deaths without sepsis still represent a very small fraction —there were two only in 1949.

Table CXXXI.—Mortality rates of Women, including non-civilians, in or associated with Pregnancy and Childbearing, with distinction of Abortion, 1928 to 1949.

Year	Per 1,000 live and still births*								Per million women aged 15–44	
	Pregnancy and childbearing without abortion			Associated causes without abortion	Abortion (including induced for toxæmia and non-therapeutic reasons)			Associated with abortion	Abortion total	Associated with abortion
	Sepsis	Other	Total		Sepsis	Other	Total			
1928	1·58	2·17	3·75	0·95	?	?	0·62	0·12	44	9
1929	1·51	2·13	3·64	1·06	?	?	0·66	0·18†	46	12†
1930	1·54	2·06	3·60	0·94	?	?	0·76	0·11	52	8
1931	1·41	2·02	3·43	1·17	0·43	0·25	0·68	0·12	46	8
1932	1·33	2·12	3·46	0·89	0·48	0·25	0·73	0·14	48	9
1933	1·49	2·23	3·72	1·10	0·52	0·29	0·80	0·16	50	10
1934	1·59	2·21	3·80	1·00	0·58	0·24	0·82	0·10	53	7
1935	1·34	2·06	3·41	0·92	0·52	0·22	0·74	0·12	47	8
1936	1·18	2·01	3·19	0·86	0·46	0·20	0·67	0·11	42	7
1937	0·79	2·01	2·79	0·92	0·37	0·22	0·58	0·16	37	10
1938	0·70	1·99	2·70	0·70	0·35	0·20	0·55	0·13	35	8
1939	0·63	1·94	2·57	0·67	0·39	0·17	0·55	0·08	35	5
1940	0·55	1·69	2·24	0·60	0·26	0·18	0·44	0·09	27	6
1941	0·48	1·78	2·26	0·60	0·35	0·19	0·54	0·08	32	5
1942	0·42	1·60	2·02	0·54	0·35	0·11	0·46	0·07	31	6
1943	0·39	1·45	1·84	0·62	0·34	0·11	0·46	0·08	32	6
1944	0·28	1·24	1·52	0·50	0·32	0·09	0·41	0·07	32	5
1945	0·24	1·23	1·47	0·49	0·25	0·08	0·33	0·03	24	2
1946	0·18	1·06	1·24	0·42	0·13	0·06	0·19	0·04	16	4
1947	0·16	0·86	1·02	0·29	0·10	0·06	0·16	0·05	14	5
1948	0·13	0·74	0·87	0·29	0·11	0·05	0·15	0·02	13	2
1949	0·11	0·71	0·82	0·21	0·10	0·05	0·15	0·03	12	2

* Based on registered live and still births up to 1938 inclusive and numbers of occurrences thereafter, and conforming with classification in use from 1940.

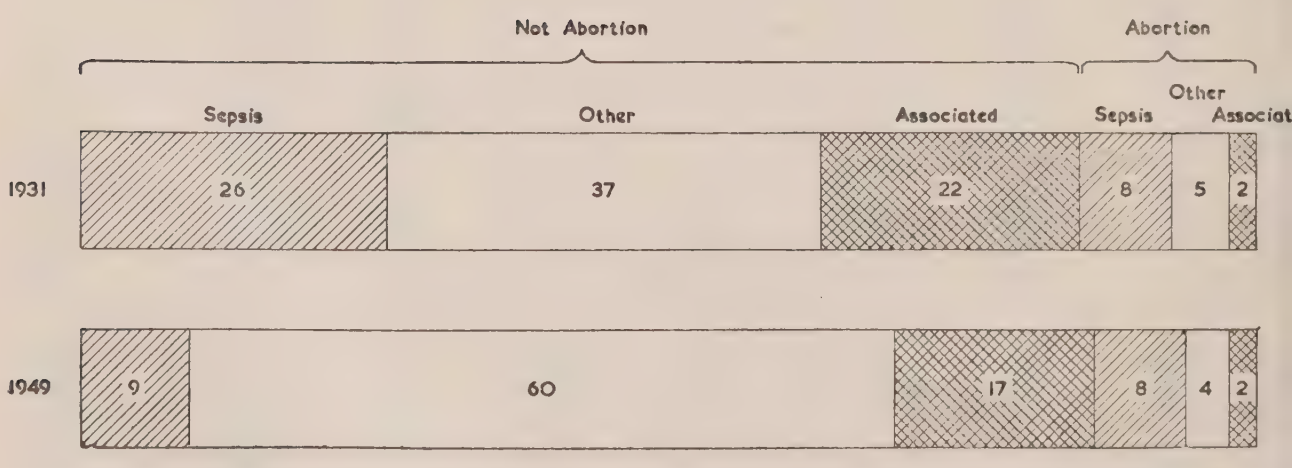
† Corrected in accordance with the note below Table CXXX.

In Table CXXXI are set out the death rates per thousand live and still births in each year from 1928 to 1949 for the principal groups. The death rate from pregnancy and childbirth without abortion has fallen from 3·75 per thousand live and still births in 1928 to 0·82 in 1949. That part of the rate attributable

to puerperal sepsis has fallen from 1·58 to 0·11, most of this decline taking place after 1936 when sulphonamides were introduced. Only a seventh of the total deaths from maternal causes in 1948 and 1949 were due to sepsis, compared with a little less than a half in 1928–30. These changes are illustrated by diagrams 9 and 10. In the Text for 1946–47 it was shown that, if the effect of sulphonamides and of penicillin is measured by the reduction which has taken place, contemporaneously, in the mortality from other streptococcal infections such as erysipelas, scarlet fever, septicæmia, pyæmia, cellulitis and acute abscess, then about three-fifths only of this reduction in puerperal sepsis was due to the improvement in specific chemotherapy and the remainder was due to aseptic precautions, including the examination of throats of attendants, and to better antenatal care. The annual numbers of deaths from puerperal embolism (regarded in successive revisions of the International List as of infective origin) from 1945 to 1949 have been 39, 55, 56, 38, 26, the rates per 1,000 live and still births being 0·056, 0·065, 0·062, 0·048, 0·035, and the fact that there was no continuous decline such as occurred for puerperal sepsis lends support to the view that deaths in recent years from embolism have not been so frequently associated with infection. The death rate from non-septic conditions in pregnancy, childbirth and the puerperium (excluding abortion) declined very little prior to 1940 when it first fell substantially below 2 per 1,000 live and still births and after a setback in 1941 the rate has declined to 0·71 in 1949, one-third of the 1928–30 average. The extension of blood transfusion in 1940, which reduced the danger from shock or hæmorrhage, and the nutritional and medical priorities accorded to expectant mothers during and after the war have made significant contributions to this improvement.

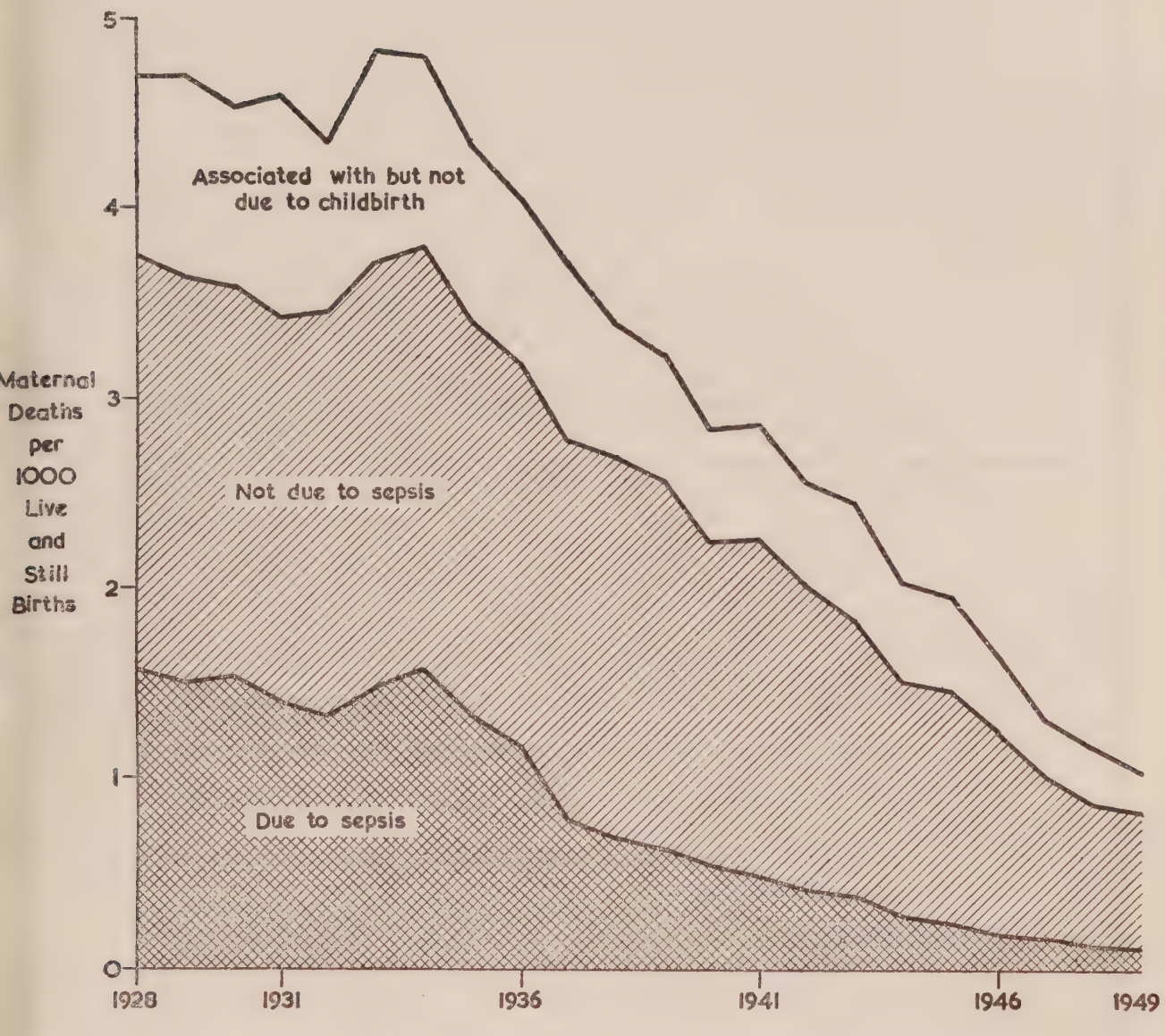
The trend of the death rate from abortion expressed per million women aged 15–44 shows, as has been indicated already, the effects of sulphonamides and penicillin upon the large infective content of the total group; it fluctuated around 50 up to 1935, then fell to 27 by 1940, and after remaining stationary during the war fell to 12 in 1949.

Diagram 9



Percentage distribution of deaths due to or associated with childbirth or abortion, 1931 and 1949.

Diagram 10



Deaths due to or associated with childbearing (excluding abortion) per 1,000 births, 1928 to 1949.

Deaths in 1948 and 1949 from the individual causes distinguished by the International List are analysed in Table CXXXII. The risks of dying from a complication of childbirth or the puerperium may be calculated at each age by relating the deaths from causes 146–150 to the numbers of maternities at each age group as shown by Table AA of Part II of the Review for 1948 and 1949, (distributing unstated ages proportionately) viz. :—

Under 20	..	63,085	30–	..	..	296,242	45 and over	..	4,165
20–	..	414,677	35–	..	..	188,037	All ages	..	1,521,976
25–	..	498,701	40–	..	..	57,069			

(55588)

Table CXXXII.—Deaths of Women, including non-civilians, certified as due to Pregnancy and Childbearing. 1948 and 1949.

Cause of Death	1948											1949										
	All ages	Civil Condition			Age (l.b.d.)							All ages	Civil Condition			Age (l.b.d.)						
		S.	M.	W.	15–	20–	25–	30–	35–	40–	45 and over		S.	M.	W.	15–	20–	25–	30–	35–	40–	45 and over
140–141. Abortion (all forms)	**123**	**19**	**95**	**9**	**3**	**21**	**33**	**27**	**28**	**9**	**2**	**114**	**25**	**80**	**9**	**7**	**24**	**29**	**17**	**29**	**8**	—
140. Post-abortive infection	87	16	64	7	3	16	24	22	18	4	—	78	21	51	6	5	19	20	13	17	4	—
(*a*) Spontaneous or therapeutic	53	6	44	3	2	11	15	11	11	3	—	53	14	35	4	3	12	13	9	12	4	—
(*aa*) With pyelitis	1	—	1	—	—	—	1	—	—	—	—	1	—	1	—	—	—	1	—	—	—	—
(*ab*) Without pyelitis	52	6	43	3	2	11	14	11	11	3	—	52	14	34	4	3	12	12	9	12	4	—
(*b*) Induced*	34	10	20	4	1	5	9	11	7	1	—	25	7	16	2	2	7	7	4	5	—	—
(*ba*) By woman herself	21	4	14	3	—	3	6	8	3	1	—	9	1	7	1	—	1	3	3	2	—	—
(*bb*) By other persons	6	4	2	—	1	—	1	—	4	—	—	6	2	3	1	1	2	2	—	1	—	—
(*bc*) By persons unstated	7	2	4	1	—	2	2	3	—	—	—	10	4	6	—	1	4	2	1	2	—	—
141. Abortion without sepsis	36	3	31	2	—	5	9	5	10	5	2	36	4	29	3	2	5	9	4	12	4	—
(*a*) Spontaneous or therapeutic	32	1	30	1	—	3	8	5	9	5	2	34	4	28	2	2	5	8	4	11	4	—
With toxæmia	11	—	11	—	—	2	3	1	3	2	—	12	—	10	2	—	3	3	2	3	1	—
Without toxæmia	21	1	19	1	—	1	5	4	6	3	2	22	4	18	—	2	2	5	2	8	3	—
(*b*) Induced*	4	2	1	1	—	2	1	—	1	—	—	2	—	1	1	—	—	1	—	1	—	—
(*ba*) By woman herself	1	—	1	—	—	1	—	—	—	—	—	1	—	—	1	—	—	—	—	1	—	—
(*bb*) By other persons	1	1	—	—	—	—	1	—	—	—	—	1	—	1	—	—	—	1	—	—	—	—
(*bc*) By persons unstated	2	1	—	1	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
142–150. Maternal causes excluding abortion	**686**	**34**	**640**	**12**	**19**	**112**	**165**	**161**	**151**	**61**	**17**	**613**	**28**	**579**	**6**	**11**	**86**	**157**	**134**	**140**	**72**	**13**
142. Ectopic gestation	34	3	30	1	—	3	8	11	9	2	1	36	3	30	3	1	7	9	5	7	7	—
143. Hæmorrhage of pregnancy	10	1	9	—	1	—	3	2	1	3	—	16	1	15	—	—	3	1	5	6	1	—
(*a*) Placenta prævia	3	—	3	—	—	—	1	1	—	1	—	6	—	6	—	—	—	—	3	3	—	—
(*b*) Premature separation of placenta	5	1	4	—	1	—	2	—	—	2	—	5	—	5	—	—	1	1	1	2	—	—
(*c*) Other hæmorrhage of pregnancy	2	—	2	—	—	—	—	1	1	—	—	5	1	4	—	—	2	—	1	1	1	—
144. Toxæmias of pregnancy	80	6	72	2	4	24	17	23	9	3	—	57	5	52	—	—	7	10	9	20	11	—
(*a*) Eclampsia	48	3	44	1	2	17	12	11	4	2	—	31	2	29	—	—	3	6	7	8	7	—
(*b*) Albuminuria, etc.	18	1	17	—	—	2	3	8	4	1	—	18	—	18	—	—	3	2	—	11	2	—
(*c*) Acute yellow atrophy	9	1	8	—	1	4	2	1	1	—	—	3	1	2	—	—	—	1	1	—	1	—
(*d*) Other toxæmias of pregnancy	5	1	3	1	1	1	—	3	—	—	—	5	2	3	—	—	1	1	1	1	1	—
145. Other diseases and accidents of pregnancy	10	—	9	1	—	—	4	2	3	1	—	19	2	17	—	—	3	6	5	3	2	—
	(*1*)	(*2*)	(*3*)	(*4*)	(*5*)	(*6*)	(*7*)	(*8*)	(*9*)	(*10*)	(*11*)	(*12*)	(*13*)	(*14*)	(*15*)	(*16*)	(*17*)	(*18*)	(*19*)	(*20*)	(*21*)	(*22*)	(*23*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
146. Hæmorrhage of childbirth and puerperium	122	5	115	2	2	21	22	31	33	10	3	88	1	87	—	3	14	19	24	17	7	4
(*a*) Placenta prævia	33	2	30	1	—	—	3	8	12	8	2	16	—	16	—	—	1	3	5	3	3	1
(*b*) Premature separation of placenta	3	—	3	—	—	1	—	1	1	—	—	6	—	6	—	—	1	1	1	2	1	—
(*c*) Other hæmorrhage of childbirth	6	1	5	—	—	2	—	1	1	1	1	8	—	8	—	—	—	—	5	2	1	—
(*d*) Other hæmorrhages after childbirth	80	2	77	1	2	18	19	21	19	1	—	58	1	57	—	3	12	15	13	10	2	3
147. Infection during childbirth and puerperium	100	5	95	—	—	13	26	28	25	7	1	84	3	81	—	1	14	29	14	18	7	1
(*a*) General or local with pyelitis	2	1	1	—	—	—	—	2	—	—	—	2	—	2	—	—	—	1	—	1	—	—
(*b*) General or local without pyelitis	31	—	31	—	—	5	6	10	9	1	—	25	—	25	—	—	5	8	9	1	2	—
(*c*) Puerperal thrombophlebitis	29	2	27	—	—	2	10	9	7	1	—	31	1	30	—	—	4	12	2	9	3	1
(*d*) Puerperal embolism and sudden death	38	2	36	—	—	6	10	7	9	5	1	26	2	24	—	1	5	8	3	7	2	—
148. Puerperal toxæmias	169	7	159	3	6	27	38	33	40	18	7	152	6	145	1	3	24	39	34	32	16	4
(*a*) Puerperal eclampsia	67	3	62	2	4	11	13	13	17	8	1	60	2	58	—	2	15	19	11	8	3	2
(*b*) Puerperal albuminuria, etc.	63	3	59	1	2	7	12	13	16	7	6	50	4	45	1	—	4	11	13	13	9	—
(*c*) Acute yellow atrophy	25	1	24	—	—	7	11	4	2	1	—	25	—	25	—	1	2	6	5	9	2	—
(*d*) Other puerperal toxæmias	14	—	14	—	—	2	2	3	5	2	—	17	—	17	—	—	3	3	5	2	2	2
149. Other accidents of childbirth	152	6	144	2	6	22	45	30	29	16	4	152	7	143	2	3	12	39	37	37	21	3
150. Other conditions of childbirth and the puerperal state	9	1	7	1	—	2	2	1	2	1	1	9	—	9	—	—	2	5	1	—	—	1
(*a*) Mastitis during puerperium and lactation	2	—	2	—	—	—	1	—	1	—	—	1	—	1	—	—	1	—	—	—	—	—
(*b*) Puerperal psychoses	2	—	2	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(*c*) Other conditions in 150	5	1	3	1	—	1	—	1	1	1	1	8	—	8	—	—	1	5	1	—	—	1
Total (including abortion)	809	53	735	21	22	133	198	188	179	70	19	727	53	659	15	18	110	186	151	169	80	13
Single	53	53	—	—	9	12	13	10	7	2	—	53	53	—	—	8	12	9	13	8	2	1
Married	735	—	735	—	13	119	181	173	169	66	14	659	—	659	—	10	97	171	137	159	74	11
Widowed	21	—	—	21	—	2	4	5	3	2	5	15	—	—	15	—	1	6	1	2	4	1
Total from abortion (140–141)	123	19	95	9	3	21	33	27	28	9	2	114	25	80	9	7	24	29	17	29	8	—
Single	19	19	—	—	2	4	5	3	5	—	—	25	25	—	—	7	6	5	3	4	—	—
Married	95	—	95	—	1	15	25	21	22	9	2	80	—	80	—	—	17	20	13	23	7	—
Widowed	9	—	—	9	—	2	3	3	1	—	—	9	—	—	9	—	1	4	1	2	1	—
Total from causes other than abortion (142–150)	686	34	640	12	19	112	165	161	151	61	17	613	28	579	6	11	86	157	134	140	72	13
Single	34	34	—	—	7	8	8	7	2	2	—	28	28	—	—	1	6	4	10	4	2	1
Married	640	—	640	—	12	104	156	152	147	57	12	579	—	579	—	10	80	151	124	136	67	11
Widowed	12	—	—	12	—	—	1	2	2	2	5	6	—	—	6	—	—	2	—	—	3	1

* For reasons other than therapeutic. Abortions induced because of toxæmia or hæmorrhage are included in (*a*), and if induced for other therapeutic reasons they are classfied in accordance with the statement on the certificate. If not stated to be induced they are assumed to have been spontaneous.

The following rates are then obtained :—

Deaths per 100,000 *maternities in* 1948–49.

Cause of Death	Under 20	20–	25–	30–	35–	40–	45 and over	All Ages
146. Hæmorrhage	8	8	8	19	27	30	168	14
(*a*) Placenta prævia ..	—	0	1	4	8	19	72	3
(*b*) Premature separation	—	0	—	1	2	2	—	1
(*c*),(*d*) Other hæmorrhage	8	8	7	14	17	9	96	10
147. Infection	2	7	11	14	23	25	48	12
(*a*),(*b*) General and local	—	2	3	7	6	5	—	4
(*c*) Thrombophlebitis ..	—	1	4	4	9	7	24	4
(*d*) Embolism, sudden death	2	3	4	3	9	12	24	4
148. Toxæmia	14	12	15	23	38	60	264	21
(*a*) Eclampsia	10	6	6	8	13	19	72	8
(*b*) Albuminuria, etc. ..	3	3	5	9	15	28	144	7
(*c*) Acute yellow atrophy	2	2	3	3	6	5	—	3
(*d*) Other toxæmia ..	—	1	1	3	4	7	48	2
149. Other accident of childbirth	14	8	17	23	35	65	168	20
150. Other puerperal conditions	—	1	1	1	1	2	48	1
146–150. Total complications of childbirth and puerperium	**38**	**36**	**53**	**79**	**124**	**180**	**696**	**68**
Ratio of rate to that for ages under 20	1·0	0·9	1·4	2·1	3·3	4·7	18·3	

The risk of dying from a complication of childbirth or the puerperium was extremely low at young ages—at ages under 30 it was only 4 in 10,000—and then increased with advancing age at first slowly and then more rapidly ; at ages 30–34 it was twice as great as at ages below 20, at 35–39 three times, at ages 40–44 nearly five times and at ages above 45, 18 times as great.

The recent improvement in the mortality risk for these complications can be demonstrated by expressing the rates shown in the table per cent. of the rates for the same causes and ages for the period 1940–45 :—

Rates in 1948–49 *per cent. of those in* 1940–45.

Cause of Death	Under 20	20–	25–	30–	35–	40–	45 and over	All Ages
146. Hæmorrhage	62	44	33	56	54	45	205	47
147. Infection	5	29	32	31	45	28	38	31
148. Toxæmia	39	40	52	56	68	75	136	54
149, 150. Other	65	36	45	44	47	58	53	44
146–150. Total complications ..	**35**	**38**	**42**	**45**	**53**	**52**	**86**	**44**

As has already been indicated the greatest reduction was in mortality from infection. Up to age 35 the remainder of the reduction in the total risk of fatal complication was fairly generally spread over causes and ages. At ages over 35 there was less improvement especially in mortality from toxæmia, with the result that the age gradient for total complications became steeper, e.g. the ratio to the mortality rate for ages under 20 was 4·7 in 1948–49 compared with 3·2 in 1940–45 at ages 40–44, and 18·3 compared with 7·4 at ages 45 and over.

Table CXXXIII (i).—Deaths of Women, including non-civilians, not classed to Pregnancy or Childbearing but certified as associated therewith. 1948.

	Cause of Death	All Ages	15–	20–	25–	30–	35–	40–	45 and over
13.	Tuberculosis of respiratory system	9	—	4	3	2	—	—	—
14–22.	Tuberculosis, other forms	3	—	—	2	—	—	1	—
30db, dc, dd.	Syphilis	1	—	—	—	1	—	—	—
33a.	Influenza	1	—	1	—	—	—	—	—
36.	Acute poliomyelitis	1	—	—	—	—	1	—	—
45–55.	Cancer	6	—	1	2	2	1	—	—
56.	Non-malignant tumours	5	—	—	2	1	—	2	—
58b.	Acute rheumatic endocarditis	3	—	1	—	2	—	—	—
61.	Diabetes mellitus	7	—	1	5	—	—	1	—
62 : 3.	Pituitary necrosis	1	—	—	—	—	—	1	—
63a.	Goitre	1	—	—	—	—	1	—	—
63b.	Exophthalmic goitre	2	—	—	1	—	1	—	—
66b : 3.	Reticulum celled medullary reticulosis	1	—	1	—	—	—	—	—
72a.	Primary purpura	1	—	—	—	1	—	—	—
73a.	Pernicious anæmia	1	—	—	—	—	1	—	—
73c.	Hypochromic anæmia	1	—	—	—	—	—	1	—
73d.	Chronic hæmolytic anæmia	1	—	—	1	—	—	—	—
76a.	Agranulocytosis	1	—	—	—	1	—	—	—
83a.	Cerebral hæmorrhage	6	—	—	2	1	1	2	—
83b.	Cerebral thrombosis	1	—	—	—	—	—	1	—
83e.	Cerebral œdema	1	—	1	—	—	—	—	—
84d : 7.	Anxiety state	1	—	—	—	—	1	—	—
87b.	Neuritis (non-rheumatic)	2	—	—	1	1	—	—	—
89a.	Otitis and other diseases of ear (without mention of mastoid)	2	—	1	1	—	—	—	—
90b.	Pericarditis	1	—	1	—	—	—	—	—
91a, b.	Bacterial endocarditis	1	—	—	—	—	1	—	—
91c.	Acute mitral endocarditis	1	—	—	—	1	—	—	—
92a.	Aortic valvular disease	1	—	—	—	—	1	—	—
92b : 1.	Mitral valve disease	47	—	8	19	10	5	4	1
92b : 2, 92c.	Other or unspecified valvular diseases	12	—	1	5	3	3	—	—
93a.	Acute myocarditis	2	—	1	—	1	—	—	—
93b.	Chronic myocarditis specified as rheumatic	1	—	—	—	—	—	—	1
93c : 1.	Cardiovascular degeneration	2	—	—	—	—	1	1	—
93c : 2.	Fatty heart	2	—	—	—	—	1	1	—
93c : 3, 93d.	Other or unspecified myocardial diseases	6	—	1	1	1	1	2	—
94a.	Diseases of the coronary arteries	2	—	—	2	—	—	—	—
95.	Other diseases of the heart	5	—	—	—	—	4	1	—
97.	Arterio sclerosis	1	—	—	1	—	—	—	—
99.	Other diseases of arteries	2	—	1	—	1	—	—	—
100a.	Varices	3	—	—	—	2	—	1	—
100b.	Other diseases of the veins	5	—	—	1	1	2	—	1
101.	Disease of the lymphatic system	1	—	—	—	—	1	—	—
102.	High blood pressure	4	—	—	—	3	—	1	—
106b.	Bronchiectasis	1	—	—	—	—	1	—	—
106c.	Bronchitis	1	—	—	—	1	—	—	—
107 : 2.	Bronchopneumonia	3	1	—	—	2	—	—	—
108 : 2.	Lobar pneumonia	6	1	1	1	2	1	—	—
110a.	Empyema	1	—	—	—	—	1	—	—
111a.	Hæmorrhagic infarction of lung	2	—	—	—	1	1	—	—
112.	Asthma	2	—	—	1	—	—	1	—
115a.	Diseases of teeth and gums	1	—	—	—	1	—	—	—
115b.	Streptococcal tonsillitis	1	—	1	—	—	—	—	—
117b.	Ulcer of the duodenum	1	—	—	—	—	1	—	—
120a.	Gastro-enteritis	1	—	—	—	—	1	—	—
121.	Appendicitis	7	—	3	1	1	2	—	—
122b : 3.	Intestinal obstruction	7	—	1	3	2	1	—	—
123b.	Idiopathic gangrene of intestine	1	—	—	—	—	1	—	—
124b.	Cirrhosis of the liver	1	—	—	—	—	1	—	—
125b.	Other diseases of the liver	2	—	1	—	1	—	—	—
130.	Acute nephritis	2	—	—	—	2	—	—	—
131.	Chronic nephritis	12	—	4	2	1	3	2	—
133a.	Pyelonephritis	1	—	—	1	—	—	—	—
133b.	Cortical necrosis of kidneys	1	—	—	—	—	—	1	—
139a : 3.	Sub-acute parametritis	1	—	—	—	—	1	—	—
157c.	Congenital malformation of heart	2	—	1	—	—	1	—	—
157ib.	Congenital malformation of circulatory system	4	—	1	1	2	—	—	—
157ic.	Meckel's diverticulum	1	1	—	—	—	—	—	—
163–198.	Violence	27	—	4	10	4	7	2	—
	Total	247	3	41	69	55	50	26	3
	Single	17	—	6	4	2	4	1	—
	Married	226	3	35	63	51	46	25	3
	Widowed	4	—	—	2	2	—	—	—
	Associated with abortion (included above)	16	1	3	4	3	3	2	—
	Single	1	—	—	—	—	1	—	—
	Married	15	1	3	4	3	2	2	—
	Widowed	—	—	—	—	—	—	—	—

(55588)

Table CXXXIII (ii).—Deaths of Women, including non-civilians, not classed to Pregnancy or Childbearing but certified as associated therewith. 1949.

	Cause of Death	All Ages	15–	20–	25–	30–	35–	40–	45 and over
6.	Cerebro-spinal (meningococcal) meningitis	2	1	—	—	1	—	—	—
13b.	Tuberculosis of respiratory system	8	1	1	4	—	1	1	—
14–22.	Tuberculosis, other forms	4	—	—	—	3	—	1	—
33a.	Influenza	1	—	—	—	1	—	—	—
37b.	Parkinsonism	1	—	—	—	—	1	—	—
45–55.	Cancer	5	—	—	—	1	2	2	—
56b.	Non-malignant tumour of female genital organs	5	—	—	1	2	1	1	—
63a.	Adenoma of thyroid	1	—	—	1	—	—	—	—
65a.	Addison's disease	1	—	—	—	1	—	—	—
65b.	Suprarenal hæmorrhage	1	—	1	—	—	—	—	—
72a.	Primary purpura	1	—	—	1	—	—	—	—
73.	Anæmias	5	1	—	—	2	1	1	—
74a.	Leukæmia	1	—	—	—	—	—	1	—
81.	Streptococcal meningitis	1	—	1	—	—	—	—	—
82 : 4.	Landry's paralysis	1	—	—	1	—	—	—	—
83.	Intra-cranial lesions of vascular origin	9	—	2	—	2	5	—	—
85.	Epilepsy	2	—	—	1	1	—	—	—
87d.	Disseminated sclerosis	1	—	—	1	—	—	—	—
91.	Acute bacterial endocarditis	1	—	—	1	—	—	—	—
92b : 1.	Mitral valve disease	29	—	6	11	7	2	3	—
92b : 2.	Chronic rheumatic endocarditis	4	—	1	1	1	—	1	—
92c.	Chronic valvular disease	1	—	—	1	—	—	—	—
93a.	Toxic myocarditis	1	—	—	—	—	1	—	—
93c : 1.	Cardiovascular degeneration	1	—	—	—	—	—	—	1
93c : 3.	Other myocardial degeneration	2	—	—	—	1	—	1	—
94a.	Diseases of the coronary arteries	2	—	—	1	—	1	—	—
95.	Other diseases of the heart	4	—	1	1	1	—	1	—
96.	Aneurysm	1	—	—	—	1	—	—	—
100a.	Varicose veins	1	—	—	—	—	—	1	—
100b.	Other diseases of the veins	2	—	—	—	1	—	1	—
102.	High blood pressure (idiopathic)	5	—	—	—	1	—	3	1
106.	Bronchitis	3	—	1	—	1	1	—	—
108 : 2.	Lobar pneumonia	1	—	—	—	—	1	—	—
109 : 2.	Pneumonia (unspecified)	1	—	—	—	—	1	—	—
111a.	Embolism of lung	1	—	—	—	—	1	—	—
112.	Asthma	3	—	—	—	1	2	—	—
115c.	Pharyngitis	1	—	—	1	—	—	—	—
120a.	Enteritis	1	—	1	—	—	—	—	—
120b.	Stercoral ulcer	1	—	—	—	1	—	—	—
121 : 1.	Appendicitis	3	—	—	1	2	—	—	—
122b.	Hernia, intestinal obstruction	2	1	1	—	—	—	—	—
125a.	Sub-acute necrosis of liver	1	—	—	1	—	—	—	—
125b.	Hepatitis	1	—	1	—	—	—	—	—
126.	Biliary calculi	1	—	—	—	—	1	—	—
131b.	Chronic nephritis	2	—	—	1	—	—	1	—
133a.	Diseases of the kidneys and ureters	2	—	1	1	—	—	—	—
134a.	Renal calculus	1	—	—	—	—	1	—	—
135b.	Rupture of the bladder	1	—	—	—	1	—	—	—
139b.	Uterine fibrosis	1	—	—	—	—	1	—	—
157c.	Congenital malformation of heart	2	—	1	—	1	—	—	—
157h.	Cystic disease of kidney	1	—	—	1	—	—	—	—
199.	Cardiac syncope	1	—	—	—	1	—	—	—
163–198.	Violence	41	—	7	10	14	8	1	1
	Total	176	4	26	42	49	32	20	3
	Single	8	1	3	—	3	1	—	—
	Married	166	3	23	42	45	31	19	3
	Widowed	2	—	—	—	1	—	1	—
	Associated with abortion (included above)	19	1	2	4	6	3	3	—
	Single	1	—	—	—	1	—	—	—
	Married	18	1	2	4	5	3	3	—
	Widowed	—	—	—	—	—	—	—	—

Tables CXXXIII (i) and (ii) show the numbers of deaths classed to each cause in the International List with mention of pregnancy, abortion or childbirth as an *associated condition* but not as the underlying cause of death, in each year 1948 and 1949. The mean annual total of such deaths was 647 in 1937–39, but had fallen to 247 in 1948 and 176 in 1949. Among the 423 deaths the principal causes were chronic affections of the valves and endocardium, 97 deaths (23 per cent.), other heart disease 31 (7 per cent.), tuberculosis 24 (6 per cent.), nephritis and other kidney diseases 21 (5 per cent.), intra-cranial lesions of

vascular origin 17 (4 per cent.) and injury 68 (16 per cent.). The remaining 39 per cent. of deaths were spread over a large number of causes including pneumonia which contributed less than 3 per cent. compared with 13 per cent. in 1937–39. Allowing for the fact that the number of confinements in 1948–49 was one-eighth lower than in 1946–47 there was clearly a fall in mortality from associated conditions especially in heart disease (198 to 128), tuberculosis (68 to 24), pneumonia (29 to 11) and kidney disease (49 to 21). This fall was not shared by deaths from violence which rose from 57 to 68. These reductions are greater than can be accounted for by the general improvement in female mortality between ages 15 and 45, as can be seen from the following figures :—

Cause of Death	Deaths with mention of pregnancy, abortion or childbirth as an associated condition			All deaths in women aged 15–44 (civilian)		
	1946–47	1948–49	Per cent. decline	1946–47	1948–49	Per cent. decline
13–22. Tuberculosis	68	24	65	12,788	11,134	13
90–95. Heart disease ..	198	128	35	4,501	3,952	12
107–109. Pneumonia	29	11	62	1,140	904	21
130–133. Nephritis and other kidney disease ..	47	20	57	1,660	1,413	15
Other diseases	356	240	33	20,743	18,120	13
All causes	**698**	**423**	**39**	**40,832**	**35,523**	**13**

Table CXXXIV.—Deaths, including those of non-civilians, with mention of Cæsarean Section, 1940 to 1949.

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Classed to Nos. 146–150.										
Placenta prævia	10	11	21	20	19	12	19	8	17	8
Toxæmias	14	19	16	15	11	17	16	17	18	10
Contracted pelvis	22	15	29	18	24	12	13	9	6	4
Malpresentation	4	12	9	7	9	11	11	5	5	4
Disproportion	9	18	13	23	22	19	25	21	4	17
Difficult labour	10	8	13	6	6	9	7	8	4	12
Other complications	16	11	22	17	32	20	13	13	8	8
Reason not stated	22	27	18	15	26	12	17	9	9	10
Classed to other causes	17	26	32	39	41	29	39	29	16	7
Total with mention of Cæsarean Section..	**124**	**147**	**173**	**160**	**190**	**141**	**160**	**119**	**87**	**80**

Table CXXXIV sets out the numbers of deaths with mention of Cæsarean Section on the death certificate in each year from 1940 to 1949 and classifies them according to the reason given on the certificate. The number of deaths in 1948–49 (167) was considerably less than in 1946–47 (279). The number attributed to any one condition is very small, sharp chance fluctuations occur from one year to another and changes should be accepted with reservation on this account. The proportion of these deaths attributed to conditions other than complications of pregnancy and childbirth was 14 per cent. compared with 20 per cent. in 1940–45 and 24 per cent. in 1946–47.

Table CXXXV (i).—Deaths, including those of non-civilians, from Pregnancy and Childbearing classified by Cause, Age, Civil Condition and Outcome of Pregnancy, 1948.

Causes of death		Deaths following or accompanied by				Deaths in the pregnant state	No information received	Total
		Live birth(s)	Still-birth(s)	Live and still birth	Abortion			
140–150.	**All causes**	**299**	**161**	**3**	**123**	**134**	**89**	**809**
	Single	12	9	1	19	10	2	53
	Married	286	152	2	95	120	80	735
	Widowed and divorced	1	—	—	9	4	7	21
	Ages 15–	8	5	—	3	5	1	22
	20–	50	29	1	21	27	5	133
	25–	84	37	—	33	32	12	198
	30–	65	34	—	27	38	24	188
	35–	67	38	2	28	22	22	179
	40–	21	16	—	9	9	15	70
	45 and over	4	2	—	2	1	10	19
140, 141.	Abortion	—	—	—	123	—	—	123
142.	Ectopic gestation	—	—	—	—	34	—	34
143a.	Placenta prævia	—	—	—	—	3	—	3
b.	Premature separation	—	—	—	—	5	—	5
c.	Other hæmorrhage of pregnancy	—	—	—	—	2	—	2
144a, b.	Eclampsia and albuminuria of pregnancy	—	—	—	—	66	—	66
c.	Acute yellow atrophy	—	—	—	—	9	—	9
d.	Other toxæmias of pregnancy	—	—	—	—	5	—	5
145.	Other diseases and accidents of pregnancy	—	—	—	—	10	—	10
146a.	Placenta prævia (with childbirth)	13	13	—	—	—	7	33
b.	Premature separation (with childbirth)	1	2	—	—	—	—	3
c.	Other hæmorrhage of childbirth	1	2	1	—	—	2	6
d.	Other hæmorrhage after childbirth	56	11	1	—	—	12	80
147a, b.	General or local puerperal infection	23	7	—	—	—	3	33
c.	Puerperal thrombophlebitis	22	4	—	—	—	3	29
d.	Puerperal embolism and sudden death	28	5	—	—	—	5	38
148a, b.	Puerperal eclampsia and albuminuria	59	53	—	—	—	18	130
c.	Acute yellow atrophy with childbirth	9	14	—	—	—	2	25
d.	Other puerperal toxæmias	7	6	—	—	—	1	14
149.	Other accidents of childbirth	75	44	1	—	—	32	152
150a.	Mastitis	1	—	—	—	—	1	2
b.	Puerperal psychoses	1	—	—	—	—	1	2
c.	Other conditions	3	—	—	—	—	2	5

In Tables CXXXV (i) and (ii) the deaths from pregnancy and childbirth are analysed according to outcome of pregnancy. Where the death certificate does not supply these details medical enquiries were instituted; nevertheless there were a considerable number of cases in which the information was not available. These enquiries have not been continued beyond the end of 1949 and this is the last period therefore for which the information will be available. The percentage distribution of outcome in all deaths classed to 140–150 for 1948–49 is compared below with corresponding distributions for 1946–47 and preceding years :—

Outcome	All Ages			Under 30		30 and over	
	1940–45	1946–47	1948–49	1946–47	1948–49	1946–47	1948–49
Live birth(s)	35·7	39·1	38·5	41·5	41·5	37·5	36·2
Stillbirth(s)	20·1	20·2	18·3	18·2	16·8	21·4	19·4
Live and still birth	0·6	0·8	0·3	1·4	0·1	0·5	0·5
Abortion	19·0	13·1	15·4	14·5	17·6	12·3	13·8
Death in pregnant state	14·1	15·7	17·1	14·3	16·6	16·5	17·4
Not known	10·5	11·1	10·4	10·1	7·4	11·8	12·7
Total	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
Number of deaths	9,361	2,263	1,536	872	667	1,391	869

The ratio of live birth to stillbirth deliveries associated with maternal death was 2·10 in 1948–49 compared with 1·94 in 1946–47 and 1·78 in 1940–45. Amongst all births the ratio was 43 in 1948–49. This means that the chance of the child being born alive in circumstances which result in maternal death was seven-tenths of the normal, as in 1946–47.

The chance of live birth of the child is much lower in deaths from placenta prævia, hæmorrhage during childbirth, or toxæmia ; in 1948–49 the ratio of live to still births in deaths from the first two causes was 0·8 compared with 0·6 in 1946–47. For toxæmia deaths the ratio was 1·2, the same as in 1946–47.

Table CXXXV (ii).—Deaths, including those of non-civilians, from Pregnancy and Childbearing classified by Cause, Age, Civil Condition and Outcome of Pregnancy, 1949.

	Causes of death	Deaths following or accompanied by				Deaths in the pregnant state	No information received	Total
		Live birth(s)	Still-birth(s)	Live and still birth	Abortion			
140–150.	**All causes**	**293**	**120**	**2**	**114**	**128**	**70**	**727**
	Single	5	6	—	25	11	6	53
	Married	287	113	2	80	114	63	659
	Widowed and divorced	1	1	—	9	3	1	15
	Ages 15–	8	2	—	7	1	—	18
	20–	45	14	—	24	20	7	110
	25–	82	25	—	29	26	24	186
	30–	64	33	—	17	24	13	151
	35–	60	28	1	29	36	15	169
	40–	29	15	1	8	21	6	80
	45 and over	5	3	—	—	—	5	13
140, 141.	Abortion	—	—	—	114	—	—	114
142.	Ectopic gestation	—	—	—	—	36	—	36
143a.	Placenta prævia	—	—	—	—	6	—	6
b.	Premature separation	—	—	—	—	5	—	5
c.	Other hæmorrhage of pregnancy	—	—	—	—	5	—	5
144a, b.	Eclampsia and albuminuria of pregnancy	—	—	—	—	49	—	49
c.	Acute yellow atrophy	—	—	—	—	3	—	3
d.	Other toxæmias of pregnancy	—	—	—	—	5	—	5
145.	Other diseases and accidents of pregnancy	—	—	—	—	19	—	19
146a.	Placenta prævia (with childbirth)	7	5	—	—	—	4	16
b.	Premature separation (with childbirth)	1	4	—	—	—	1	6
c.	Other hæmorrhages of childbirth	3	5	—	—	—	—	8
d.	Other hæmorrhages after childbirth	44	9	—	—	—	5	58
147a, b.	General or local puerperal infection	17	7	—	—	—	3	27
c.	Puerperal thrombophlebitis	20	3	—	—	—	8	31
d.	Puerperal embolism and sudden death	18	4	—	—	—	4	26
148a, b.	Puerperal eclampsia and albuminuria	58	41	—	—	—	11	110
c.	Acute yellow atrophy (with childbirth)	11	13	1	—	—	—	25
d.	Other puerperal toxæmias	11	2	—	—	—	4	17
149.	Other accidents of childbirth	97	27	1	—	—	27	152
150a.	Mastitis	1	—	—	—	—	—	1
b.	Puerperal psychoses	—	—	—	—	—	—	—
c.	Other conditions	5	—	—	—	—	3	8

Table CXXXVI.—Deaths of Married Women, including non-civilians, classed to Pregnancy and Childbearing according to previous Fertility and outcome of the Pregnancy which resulted in Death, 1948 and 1949.

Number previous pregnancies	Total of known birth order	With live or still birth					Total with live or still birth	With abortion	Deaths in the pregnant state
		Single birth		Multiple birth					
		Live	Still	Live only	Live and Still	Still only			
1948									
0	236	105	74	8	—	3	190	14	32
1	151	77	26	5	—	—	108	25	18
2	69	28	11	3	—	—	42	19	8
3	43	12	7	1	—	—	20	17	6
4	28	7	8	1	1	—	17	8	3
5	14	4	5	—	—	—	9	4	1
6	9	4	1	—	—	—	5	2	2
7	8	4	2	—	—	—	6	—	2
8	4	1	2	—	—	—	3	—	1
9	2	1	—	—	—	—	1	1	—
10	2	—	1	—	—	—	1	—	1
11	3	2	1	—	—	—	3	—	—
12	2	1	1	—	—	—	2	—	—
13	1	1	—	—	—	—	1	—	—
14	1	—	1	—	—	—	1	—	—
Totals of above ..	**573**	**247**	**140**	**18**	**1**	**3**	**409**	**90**	**74**
1949									
0	225	121	47	7	1	1	177	16	32
1	122	65	19	5	—	—	89	13	20
2	66	26	9	6	—	1	42	17	7
3	39	14	10	1	1	—	26	8	5
4	20	8	4	—	—	—	12	4	4
5	22	7	7	—	—	1	15	2	5
6	6	2	1	—	—	—	3	1	2
7	6	2	—	1	—	—	3	—	3
8	2	1	1	—	—	—	2	—	—
9	8	3	3	1	—	—	7	—	1
10	3	1	—	—	—	—	1	1	1
11	4	2	1	—	—	—	3	—	1
12	2	—	2	—	—	—	2	—	—
Totals of above ..	**525**	**252**	**104**	**21**	**2**	**3**	**382**	**62**	**81**

Table CXXXVI shows the distribution according to the number of previous pregnancies of those deaths in 1948 and 1949 for which the information was available, viz., 1,098 deaths out of a total of 1,536. The proportion of deaths associated with first pregnancies in 1948–49 was 42 per cent. compared with 46 per cent. in 1946–47 and 47 per cent. in 1940–45. Deaths associated with multiple deliveries totalled 48 in the two years or 6·1 per cent. of all the deaths with live or still birth compared with 6·6 per cent. in 1946–47. Multiple maternities formed 1·2 per cent. of all maternities in 1948–49 and thus it appears that the risk of maternal death after delivery is increased about five times if the pregnancy is multiple.

Table CXXXVII.—Distribution throughout England and Wales of Mortality from Pregnancy, Childbirth, and Abortion and of Prevalence of Puerperal Pyrexia. 1948 and 1949.

Area	Per 1,000 live and still births						
	Deaths from					Notified cases of pyrexia*	Notified cases of pyrexia per death from sepsis
	Maternal sepsis	Other maternal causes	Post abortive sepsis	Other abortion	Total including abortion		
1948							
England and Wales	**0·13**	**0·74**	**0·11**	**0·05**	**1·02**	**6·9**	**29**
Regional Summary :							
South East	0·12	0·61	0·14	0·05	0·91	7·7	30
Greater London	0·11	0·48	0·21	0·06	0·85	8·8	28
Remainder of South East	0·12	0·77	0·06	0·04	1·00	6·2	34
North	0·11	0·81	0·10	0·03	1·06	7·4	35
North I	0·13	1·06	0·04	0·07	1·30	7·1	40
North II	0·15	1·04	0·11	—	1·30	7·8	30
North III	0·06	0·70	0·15	0·01	0·93	6·3	30
North IV	0·12	0·73	0·10	0·04	0·99	8·0	37
Midland	0·15	0·67	0·06	0·07	0·94	6·2	30
Midland I	0·16	0·68	0·07	0·06	0·97	6·4	28
Midland II	0·12	0·64	0·04	0·08	0·87	5·7	36
East	0·19	0·65	0·05	0·05	0·95	5·3	22
South West	0·13	0·76	0·05	—	0·93	7·0	40
Wales	0·17	1·32	0·21	0·04	1·73	3·3	9
Wales I	0·17	1·27	0·25	0·06	1·76	3·9	9
Wales II	0·15	1·44	0·08	—	1·67	1·7	8
Density Summary :							
County boroughs†	0·11	0·65	0·12	0·04	0·91	10·1	44
Other urban districts†	0·12	0·88	0·08	0·04	1·12	4·6	22
Rural districts†	0·17	0·93	0·04	0·07	1·21	3·2	15
1949							
England and Wales	**0·11**	**0·71**	**0·10**	**0·05**	**0·97**	**6·4**	**30**
Regional Summary :							
South East	0·10	0·58	0·14	0·06	0·88	7·3	30
Greater London	0·05	0·51	0·17	0·07	0·80	8·7	39
Remainder of South East	0·17	0·66	0·10	0·05	0·98	5·7	21
North	0·12	0·76	0·11	0·05	1·04	6·9	30
North I	0·14	0·74	0·12	0·05	1·05	6·0	23
North II	0·15	0·12	—	0·08	1·36	6·4	42
North III	0·06	0·74	0·13	0·02	0·95	6·7	35
North IV	0·13	0·70	0·12	0·05	1·01	7·5	30
Midland	0·10	0·69	0·06	0·03	0·88	5·2	31
Midland I	0·09	0·75	0·06	0·04	0·94	5·4	35
Midland II	0·13	0·57	0·06	—	0·76	4·9	26
East	0·14	0·77	—	0·09	1·00	5·0	35
South West	0·11	0·87	—	0·03	1·00	6·3	60
Wales	0·13	0·99	0·20	0·04	1·36	3·6	11
Wales I	0·12	1·05	0·24	0·06	1·48	4·7	13
Wales II	0·16	0·80	0·08	—	1·05	0·6	2
Density Summary :							
County boroughs†	0·11	0·71	0·10	0·05	0·98	9·4	43
Other urban districts†	0·14	0·74	0·09	0·03	1·01	4·1	18
Rural districts†	0·12	0·84	0·06	0·04	1·05	2·9	16

* Includes puerperal fever where notified separately.
† Excluding Greater London.

The regional distribution of maternal mortality and also of notification rates for puerperal pyrexia in each year 1948 and 1949 is shown in Table CXXXVII. Including abortion, the highest mortality rates were in Wales as in previous years. The lowest rates were, as before, in Greater London and Midland II. Excluding abortion has the effect of increasing the advantage of Greater London (where the post-abortive sepsis mortality is high) and of emphasising the excess mortality in rural districts (where abortion mortality is low). The rate of pyrexia notification declined from 11·5 per thousand live and still births in 1940–45, 8·5 in 1946 and 7·2 in 1947, to 6·9 in 1948 and 6·4 in 1949. The ratios of pyrexia notifications to sepsis deaths in 1948 and 1949 were 29 and 30 compared with 27 and 28 in 1946 and 1947, and with 17 in 1940–45; the ratios in the two years in county boroughs were more than twice as high as in other districts. There is evidently wide disparity between town and country in the extent to which puerperal pyrexia is notified, but it has to be borne in mind that, while deaths are allocated to place of residence, notifications are, outside London, allocated to the area in which the diagnosis is made so that cases admitted from rural areas to nearby urban hospitals and dying from puerperal sepsis would be notified to the urban area as a case of pyrexia while assigned as a death in the rural area. This would tend to make the ratio of notifications to deaths higher in the urban than in the rural area.

163, 164. Suicide.—The average number of deaths per year from suicide in the three quinquennial periods 1935–39, 1940–44 and 1945–49 were: males 3,464, 2,708, 2,850; females 1,670, 1,381, 1,643. The decrease shown during the 1939–45 war has therefore not been maintained, although the numbers have not so far returned to their pre-war level.

Table CXXXVIII shows the mean annual death rates at different ages from 1861 to 1949 per million persons living. The rates for men aged 35–44 increased from 114 in 1947 to 131 and 134 in 1948 and 1949, and those for men aged 45–64 continued the upward trend which began in 1946. The rate of 469 for men aged 65–74 in 1948 was the highest since 1938. At ages 75 and over the rate decreased from 480 in 1947 to 388 in 1948, but rose again to 490 in 1949. The averages of the death rates for the four post-war years 1946–1949 expressed as percentages of those of the four pre-war years 1936–39 are :—

Ages	20–	25–	35–	45–	55–	65–	75 & over
Percentages ..	82	71	73	73	67	86	99

The rates for those generally considered to be past the working ages, i.e. 65 and over, are tending towards the pre-war level.

The rates for young women aged 20–24 were lower than those for the two preceding years in both 1948 and 1949, while at ages 25–44 the downward trend which began in 1946 continued. The rates in 1948 at ages 45–64 were the highest recorded for the ten years 1940–49, and at ages 65–74 there was also an increase. The rate of 138 in 1949 for women aged 75 and over was not only the highest for the ten years 1940 to 1949 but was also higher than any of the averages shown for the periods from 1861 onwards.

The female rates up to and including 1939 included deaths from self-induced abortion; these were excluded from 1940 onwards. In the following table the mean annual rates for quinquennial periods from 1921 to 1945 and for the four years 1946–49 are compared, the female rates from 1940 being corrected to allow for the deaths from self-induced abortion.

Table CXXXVIII.—Suicide : Mean Annual Death Rates at different Ages, 1861-1949. Comparative Mortality Indices, 1931-1949.

	Mean annual rates per million living*										C.M.I. (1938 base)*
	0–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	
Males											
1861–70	—	4	28	59	93	163	263	377	359	251	
1871–80	—	4	24	64	104	179	276	408	416	335	
1881–90	—	4	29	67	117	202	310	437	478	373	
1891–1900	—	5	34	84	142	241	348	456	479	386	
1901–10	—	4	36	91	152	252	397	523	508	382	
1911–20	—	3	32	69	122	196	278	389	380	350	
1921–25	—	2	28	71	100	200	326	457	493	408	
1926–30	—	2	35	84	122	222	366	513	530	464	
1931–35	—	2	39	96	141	209	379	542	534	483	1·044
1936 ..	—	2	29	91	120	192	300	491	478	436	0·993
1937 ..	—	4	32	81	132	173	298	467	497	455	0·981
1938 ..	—	1	28	78	123	185	308	490	496	505	1·000
1939 ..	—	1	35	87	109	164	270	464	467	445	0·922
1940 ..	—	3	27	88	95	150	243	393	457	487	0·833
1941 ..	—	3	37	81	100	130	180	295	374	414	0·688
1942 ..	—	3	42	77	96	117	172	258	331	366	0·630
1943 ..	—	2	38	104	110	140	182	262	348	314	0·668
1944 ..	—	3	34	111	108	126	190	269	332	395	0·669
1945 ..	—	4	34	82	110	116	189	272	352	421	0·668
1946 ..	—	5	30	71	93	145	199	300	391	465	0·723
1947 ..	—	3	36	69	85	114	207	314	383	480	0·708
1948 ..	—	2	29	76	83	131	217	338	469	388	0·758
1949 ..	—	1	33	62	81	134	236	334	422	490	0·763
Females†											
1861–70	—	3	31	31	35	53	84	87	83	70	
1871–80	—	3	26	33	39	54	81	95	92	64	
1881–90	—	3	34	40	43	64	84	92	86	53	
1891–1900	—	4	37	41	52	76	96	100	88	52	
1901–10	—	3	34	45	56	80	109	109	88	49	
1911–20	—	2	30	41	50	74	100	102	81	52	
1921–25	—	1	23	40	48	78	120	125	92	60	
1926–30	—	0	27	45	66	96	148	158	123	66	
1931–35	—	—	23	49	77	108	153	165	135	84	0·973
1936 ..	—	—	19	39	61	99	164	161	134	68	0·953
1937 ..	—	1	13	46	73	100	155	162	152	83	0·989
1938 ..	—	1	15	39	68	103	163	176	134	96	1·000
1939 ..	—	1	12	39	72	101	154	164	144	107	0·980
1940 ..	—	1	15	28	51	89	138	175	151	94	0·919
1941 ..	—	—	11	20	55	70	113	140	117	67	0·756
1942 ..	—	1	11	18	48	78	111	127	114	81	0·739
1943 ..	—	1	7	25	54	86	104	122	117	66	0·746
1944 ..	—	—	5	24	48	74	97	118	114	70	0·693
1945 ..	—	1	10	27	55	78	113	135	122	79	0·781
1946 ..	—	1	15	27	52	87	135	157	146	92	0·887
1947 ..	—	—	11	28	51	80	134	160	166	114	0·900
1948	—	—	11	20	50	80	141	183	173	98	0·930
1949 ..	—	1	15	26	45	77	127	165	165	138	0·890

* Civilians only from 3rd September, 1939, for males and from 1st June, 1941, for females.
† The female rates up to and including 1939 include some cases of self-induced abortion, which was excluded from suicide from 1940.

	10–	15–	20–	25–	35–	45–	55–	65–	75 and over
Males									
1921–25	2	28	71	100	200	326	457	493	408
1926–30	2	35	84	122	222	366	513	530	464
1931–35	2	39	96	141	209	379	542	534	483
1936–40	2	30	85	116	173	284	461	479	466
1941–45	3	37	91	105	126	183	271	347	382
1946–49	3	32	70	86	131	215	322	416	456
Females									
1921–25	1	23	40	48	78	120	125	92	60
1926–30	0	27	45	66	96	148	158	123	66
1931–35	—	23	49	77	108	153	165	135	84
1936–40	1	15	39	66	99	155	168	143	90
1941–45	1	9	27	58	81	108	128	117	73
1946–49	0	13	28	52	82	134	166	163	111

There was a general rise in the rates for men aged 15 and upwards and women aged 20 and over as the period of prosperity in 1921–25 gave place to the depression and unemployment of 1931–35. During 1936–40 the male rates and those of women aged 15–44 declined, while at ages 45 and over women's rates continued their upward trend. The war years of 1941–45 brought a decrease in rates for women of all ages over 15, the average rate in the age group 45–54 being only 70 per cent. of that for 1936–40. During 1946–49 the rates for young men, aged 15–34 have declined, while at ages 35 and over they have increased without, however, reaching the pre-war level. The average rates for women were higher in 1946–49 than in 1941–45 at all ages from 15 upwards except 25–34. During the war years many women aged 45 and over obtained a new interest and companionship in their lives by undertaking whole or part-time work at an age when they might feel themselves less needed by their families, and it may be that this had favourable repercussions on the suicide rate.

The following table shows for the years 1940 to 1949 the numbers of suicides by month of occurrence (as opposed to the number of registrations on which the other tables are based), standardized to 31 days in each month.

	Suicides by Months of Occurrence (standardized to 31 days)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Males												
1940 ..	217	262	273	249	262	312	277	255	229	221	182	198
1941 ..	183	213	213	252	224	253	196	146	188	154	173	169
1942 ..	158	197	201	218	167	222	177	161	179	154	142	154
1943 ..	164	192	218	207	174	250	218	158	170	168	137	180
1944 ..	203	181	212	192	221	186	174	184	161	165	164	181
1945 ..	157	209	196	200	188	221	190	182	177	182	197	193
1946 ..	221	242	248	270	218	254	253	189	213	179	226	215
1947 ..	207	193	235	251	263	259	230	228	252	208	196	214
1948 ..	241	203	300	305	260	253	245	256	249	225	249	236
1949 ..	256	257	277	281	290	274	290	239	227	220	229	238
Females												
1940 ..	122	157	136	160	149	162	144	152	122	113	118	109
1941 ..	113	106	128	119	128	123	122	85	115	116	95	107
1942 ..	90	100	141	108	104	117	126	111	98	107	116	128
1943 ..	82	123	114	118	115	119	122	126	110	118	95	139
1944 ..	102	106	125	112	125	100	111	116	92	88	98	99
1945 ..	94	116	116	119	118	146	142	112	110	119	136	133
1946 ..	132	133	157	143	159	143	157	116	145	124	146	123
1947 ..	130	114	136	166	169	160	155	127	151	134	127	127
1948 ..	140	128	167	169	140	156	177	139	131	142	151	153
1949 ..	141	134	153	146	183	182	144	128	127	122	150	121

In each of the ten years the highest totals for men occurred in the second quarter and the lowest in the fourth quarter. For women the highest numbers occurred in the second quarter except in 1942, 1943 and 1945, while the lowest numbers did not occur consistently in any particular quarter.

Table CXXXIX shows the regional rates for deaths from suicide in each of the three years 1947 to 1949, arranged in descending order of magnitude.

Table CXXXIX.—Suicide : Civilian death rates per million living by Sex at ages 15–44, 45–64 and 65 and over in Geographical Regions in descending order of magnitude, 1947, 1948 and 1949.

	15–44				45–64				65 and over			
	Males		Females		Males		Females		Males		Females	
1947												
South West	100	G. London	70		Wales II	352	East	179	Midland I	480	North II	174
South East*	99	South East*	59		South West	302	Midland II	176	Wales I	466	South East*	171
North IV	95	Midland II	59		Midland II	298	South West	168	East	446	Midland II	171
North I	94	Midland I	53		Midland I	281	South East*	156	South West	437	East	168
Midland II	92	North II	51		East	281	North III	156	Midland II	436	G. London	163
East	89	East	46		South East*	268	North IV	156	North III	409	Midland I	151
G. London	86	Wales II	46		North II	250	G. London	134	North IV	389	North III	142
Wales I	85	North III	43		Wales I	249	Midland I	132	South East*	387	North IV	116
Midlands I	75	North IV	41		North III	235	Wales I	117	Wales II	383	Wales I	116
Wales II	72	Wales I	37		North IV	223	Wales II	117	G. London	381	North I	114
North III	62	South West	33		G. London	215	North II	99	North I	348	South West	108
North II	60	North I	32		North I	213	North I	98	North II	244	Wales II	58
1948												
South West	130	G. London	61		South West	301	South East*	200	North IV	511	North IV	184
Midland I	105	North II	61		North VI	293	Midland I	184	North III	510	North III	170
North IV	104	Midland II	51		G. London	285	North II	171	G. London	482	G. London	162
G. London	102	North IV	51		Midland I	264	North III	169	Midland I	482	Midland I	156
Midland II	97	South East*	48		Midland II	261	G. London	163	South East*	432	East	150
North II	93	North I	48		North I	259	North IV	160	East	430	North II	148
East	80	East	48		South East*	258	North I	142	North II	403	Midland II	143
South East*	79	Wales II	46		North III	254	Wales I	126	Midland II	392	South East*	127
North III	77	South West	45		East	245	South West	124	North I	364	Wales I	124
Wales I	74	Midland I	44		Wales I	245	East	114	Wales I	353	South West	123
Wales II	62	North III	42		North II	239	Midland II	105	South West	336	North I	96
North I	57	Wales I	37		Wales II	198	Wales II	83	Wales II	333	Wales II	58
1949												
North II	129	North II	69		South West	337	South West	201	Midland II	603	North IV	209
East	119	G. London	61		Midland II	310	North IV	156	East	550	Midland II	178
South West	105	Midland II	56		Midland I	308	South East*	152	North IV	476	East	178
South East*	104	East	55		North I	291	Midland I	147	Midland I	466	North III	171
Wales II	96	South West	54		North IV	283	G. London	143	South East*	438	Midland I	159
G. London	93	South East*	48		G. London	280	Midland II	139	South West	421	G. London	153
North IV	89	Wales I	47		South East*	268	North I	137	North I	420	Wales I	152
Midland I	83	North I	42		Wales II	256	North III	126	G. London	414	North I	145
Midland II	83	North III	42		East	253	Wales I	124	North II	403	South West	137
North I	82	North IV	41		North III	252	East	117	Wales I	388	South East*	129
Wales I	78	Midland I	39		North II	229	North II	98	North III	342	North II	108
North III	72	Wales II	26		Wales I	185	Wales II	73	Wales II	275	Wales II	19

* Excluding Greater London.

Among men aged 15–44 the South West had consistently high rates over the three years, and for women at these ages the rates were high in Greater London, Midland II and North II. At ages 45–64 men showed high rates in the South West and the Midlands, and women in the South East, whereas the rates for Greater London were lower down in the scale. There were consistently high rates

in Midland I for men aged 65 and over, but rates for women at these ages varied from year to year. The differences between the rates in the best and worst districts were greater at the higher ages, and generally speaking were greater for men than women.

In the following table the sex-ratio of male to female suicide rates during 1947 to 1949 is shown for the main regions and compared with that for England and Wales.

Areas	Ratio of Male to Female Suicide Rates at Ages								
	15–44			45–64			65 and over		
	1947	1948	1949	1947	1948	1949	1947	1948	1949
England and Wales	**1·65**	**1·86**	**1·88**	**1·73**	**1·68**	**1·93**	**2·77**	**3·01**	**2·84**
Regional Summary :									
Greater London	1·23	1·67	1·52	1·60	1·75	1·96	2·34	2·98	2·71
Remainder of South East ..	1·68	1·65	2·17	1·72	1·29	1·76	2·26	3·40	3·40
North	2·00	1·80	1·98	1·61	1·69	1·94	2·88	2·90	2·37
Midland	1·47	2·22	1·84	1·95	1·68	2·13	2·94	2·96	3·10
East	1·93	1·67	2·16	1·57	2·15	2·16	2·65	2·87	3·09
South West	3·03	2·89	1·94	1·80	2·43	1·68	4·05	2·73	3·07
Wales	2·10	1·79	2·02	2·37	2·05	1·88	4·63	3·44	3·35

In the Greater London area the ratio exceeded the national ratio only at ages 45–64 in 1948 and 1949. The sex-ratios were high in the South West, due to the high rates among men, and also in Wales, but the latter are based on a few cases only.

The rates in the density aggregates and the sex-ratios of these rates are shown below.

Density Aggregates (excluding Greater London)	15–44			45–64			65 and over		
	Male	Female	M/F Ratio	Male	Female	M/F Ratio	Male	Female	M/F Ratio
1947									
County boroughs	88	52	1·69	261	162	1·61	412	154	2·68
Other urban districts	85	45	1·89	250	149	1·48	413	152	2·72
Rural districts	86	43	2·00	275	119	2·31	402	109	3·69
1948									
County boroughs	97	54	1·80	279	174	1·60	496	162	3·06
Other urban districts	88	40	2·20	256	171	1·50	449	160	2·81
Rural districts	84	47	1·79	257	112	2·29	344	92	3·74
1949									
County boroughs	88	44	2·00	291	163	1·79	451	198	2·28
Other urban districts	81	48	1·69	266	147	1·81	455	151	3·01
Rural districts	114	45	2·53	274	105	2·61	436	105	4·15

The rates for men in the county boroughs were slightly higher at ages under 65 than they were in the other urban districts, but otherwise there was not a great deal of variation. The rates for women at ages 45 and over were highest each year in the county boroughs and lowest in rural districts.

Method of suicide.—Details of the means used in committing suicide are shown in Tables 6, 21 and 25 of Part I of the Annual Statistical Review. The following table compares the proportions in which each agent was employed per 1,000 males or females effecting suicide during 1935, 1940, 1945, 1948 and 1949.

	MALES					FEMALES				
	1935	1940	1945	1948	1949	1935	1940	1945	1948	1949
Total	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Poisoning by coal gas	307	327	327	371	358	407	467	477	515	503
Other poisoning	103	82	81	101	95	190	170	128	171	180
Hanging, strangulation	175	189	216	199	209	108	99	91	75	84
Drowning	130	128	132	115	118	173	146	186	143	139
Firearms, explosives	63	91	82	69	73	4	13	15	7	6
Cutting and piercing instruments	139	110	99	63	77	45	36	29	21	22
Jumping from high places	30	36	23	32	26	40	39	43	35	39
On railways	48	30	36	41	36	27	20	22	22	22
Other and unspecified	5	8	4	9	8	7	9	9	11	5
Actual total number, all methods	3,525	2,894	2,238	2,961	3,023	1,659	1,623	1,432	1,757	1,697

For both males and females the proportion using coal gas was higher and that using cutting and piercing instruments was lower in 1948 and 1949 than in any of the other three years shown. The proportion of suicides by drowning was less in 1948 and 1949 than in the other three years for both sexes. The larger proportion of women than men suicides due to poisoning other than by coal gas was largely accounted for, in 1949 for example, by the disparity between the numbers using lysol (16 M, 39 F), aspirin (51 M, 82 F) and soporific drugs, the excess of females in the latter being largely due to 51 as against 27 males using barbiturates.

	MALES					FEMALES				
	10–	15–	25–	45–	65 and over	10–	15–	25–	45–	65 and over
	1949. Proportionate Distribution									
Total	1,000	1,000	1,000	1,000	1,000	—	1,000	1,000	1,000	1,000
Poisoning by coal gas	—	371	340	366	357	—	566	476	472	574
Other poisoning	—	105	115	104	65	—	167	200	188	149
Hanging, strangulation	500	210	215	206	207	—	67	102	83	72
Drowning	500	81	100	107	155	—	100	112	159	131
Firearms, explosives	—	105	103	73	45	—	—	12	5	2
Cutting or piercing instruments	—	16	40	82	107	—	—	7	29	28
Jumping from high places	—	48	20	22	36	—	50	39	40	35
On railways	—	48	61	32	21	—	50	37	21	7
Other and unspecified	—	16	6	8	7	—	—	15	3	2

The above table shows for 1949 the proportionate distribution per 1,000 suicides at different ages among civilians according to the method used. At all ages over 15 coal gas was the means most frequently used by both men and women, the next in order of frequency being hanging and strangulation for men and poisoning other than by coal gas for women. The proportion of males effecting suicide by drowning or by the use of cutting or piercing instruments increased with age, while the proportion using firearms decreased. Among women the proportion of suicides on railways decreased with age. A small number of suicides among women were committed with firearms, and a relatively insignificant number by cutting or piercing instruments at ages up to 44. The proportion of women at ages 15–24 and 25–44 effecting suicide by hanging or strangulation, 67 and 102 in 1949, had increased from 22 and 80 in 1948.

Table CXL shows the numbers of suicides of civilians and their proportionate distribution according to method by sex and region.

Table CXL(i).—Suicide : Numbers of Deaths and proportionate distribution of Method by Sex in Regions and different classes of Area (Civilians only, 1948.

	England and Wales	North	Midland and East	Wales	South West and South East*	Greater London	County Boroughs*	Other Urban Districts*	Rural Districts*
MALES									
Number of deaths									
Total (163, 164)	**2,961**	**931**	**684**	**149**	**595**	**602**	**928**	**916**	**515**
Poisoning by coal gas (163ba)	1,098	405	227	33	172	261	441	333	63
Other poisoning (remndr. 163)	300	73	62	16	59	90	82	84	44
Hanging or strangulation (164a)	589	187	148	44	113	97	162	185	145
Drowning (164b)	340	107	106	20	71	36	98	123	83
Firearms and explosives (164c)	205	44	52	7	84	18	27	50	110
Cutting or piercing instruments (164d)	187	62	41	17	37	30	64	55	38
Jumping from high places (164e)	95	21	15	7	19	33	27	31	4
On railways (164fa)	120	25	28	4	31	32	21	42	25
Others, including other crushing (164fb, g)	27	7	5	1	9	5	6	13	3
Proportionate distribution per 1,000 total									
Total	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
Poisoning by coal gas	371	434	332	221	290	433	475	363	122
Other poisoning	101	78	91	107	99	150	88	92	85
Hanging or strangulation	199	201	216	296	190	161	175	202	281
Drowning	115	115	155	134	119	60	106	134	161
Firearms and explosives	69	47	76	47	141	30	29	55	214
Cutting or piercing instruments	63	67	60	114	62	50	69	60	74
Jumping from high places	32	23	22	47	32	55	29	34	8
On railways	41	27	41	27	52	53	23	46	49
Others	9	8	7	7	15	8	6	14	6
FEMALES									
Number of deaths									
Total (163, 164)	**1,757**	**558**	**367**	**73**	**379**	**380**	**579**	**564**	**234**
Poisoning by coal gas (163ba)	904	325	188	19	193	179	370	299	56
Other poisoning (remndr. 163)	301	57	56	17	68	103	71	82	45
Hanging or strangulation (164a)	131	46	26	8	26	25	30	46	30
Drowning (164b)	251	84	70	20	56	21	58	96	76
Firearms and explosives (164c)	13	2	5	1	4	1	1	3	8
Cutting or piercing instruments (164d)	37	22	6	3	2	4	16	10	7
Jumping from high places (164e)	61	7	9	1	17	27	15	12	7
On railways (164fa)	39	9	5	3	8	14	10	14	1
Others, including other crushing (164fb, g)	20	6	2	1	5	6	8	2	4
Proportionate distribution per 1,000 total									
Total	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
Poisoning by coal gas	515	582	511	260	509	470	638	530	239
Other poisoning	171	102	153	233	179	271	123	145	192
Hanging or strangulation	75	82	71	110	69	66	52	82	128
Drowning	143	151	191	273	148	55	100	170	326
Firearms and explosives	7	4	14	14	11	3	2	5	34
Cutting or piercing instruments	21	39	16	41	5	11	28	18	30
Jumping from high places	35	13	25	14	45	71	26	21	30
On railways	22	16	14	41	21	37	17	25	4
Others	11	11	5	14	13	16	14	4	17

* Excluding Greater London.

Table CXL(ii).—Suicide : Numbers of Deaths and proportionate distribution of Method by Sex in Regions and different classes of Area (Civilians only), 1949.

	England and Wales	North	Midland and East	Wales	South West and South East*	Greater London	County Boroughs*	Other Urban Districts*	Rural Districts*
MALES									
Number of deaths									
Total (163, 164)	**3,023**	**906**	**752**	**150**	**649**	**566**	**906**	**927**	**624**
Poisoning by coal gas (163ba)	1,081	380	228	33	205	235	438	342	66
Other poisoning (remndr. 163)	288	69	61	10	69	79	85	75	49
Hanging or strangulation (164a)	632	188	180	47	131	86	157	169	220
Drowning (164b)	357	97	112	20	76	52	81	132	92
Firearms and explosives (164c)	220	38	61	14	76	31	25	62	102
Cutting or piercing instruments (164d)	232	79	58	16	54	25	69	83	55
Jumping from high places (164e)	80	20	20	2	11	27	19	22	12
On railways (164fa)	110	25	27	5	26	27	22	37	24
Others, including other crushing (164fb, g)	23	10	5	3	1	4	10	5	4
Proportionate distribution per 1,000 total									
Total	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
Poisoning by coal gas	358	419	303	220	316	414	484	369	106
Other poisoning	95	76	81	67	106	140	94	81	79
Hanging or strangulation	209	208	239	314	202	152	173	182	354
Drowning	118	107	149	133	117	92	89	142	147
Firearms and explosives	73	42	81	93	117	55	28	67	163
Cutting or piercing instruments	77	87	77	107	83	44	76	90	88
Jumping from high places	26	22	27	13	17	48	21	24	19
On railways	36	28	36	33	40	48	24	40	38
Others	8	11	7	20	2	7	11	5	6
FEMALES									
Number of deaths									
Total (163, 164)	**1,697**	**525**	**370**	**74**	**372**	**356**	**565**	**542**	**234**
Poisoning by coal gas (163ba)	852	298	178	20	173	183	338	281	50
Other poisoning (remndr. 163)	306	79	56	21	69	81	99	71	55
Hanging or strangulation (164a)	143	53	26	10	30	24	41	46	32
Drowning 164b	235	70	79	11	52	23	60	87	65
Firearms and explosives (164c)	10	—	2	1	6	1	—	4	5
Cutting or piercing instruments (164d)	38	10	7	6	10	5	5	19	9
Jumping from high places (164e)	66	12	11	2	18	23	19	19	5
On railways (164fa)	38	2	8	2	14	12	2	14	10
Others, including other crushing (164fb, g)	9	1	3	1	—	4	1	1	3
Proportionate distribution per 1,000 total									
Total	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**
Poisoning by coal gas	503	568	481	270	465	513	597	518	214
Other poisoning	180	150	151	283	185	228	175	131	235
Hanging or strangulation	84	101	70	135	81	67	73	85	137
Drowning	139	133	214	149	140	65	106	161	278
Firearms and explosives	6	—	5	14	16	3	—	7	21
Cutting or piercing instruments	22	19	19	81	27	14	9	35	38
Jumping from high places	39	23	30	27	48	65	34	35	21
On railways	22	4	22	27	38	34	4	26	43
Others	5	2	8	14	—	11	2	2	13

* Excluding Greater London.

169. Deaths caused by Railway Accidents.—The average annual number of deaths caused by railway accidents during 1946–49 was 464, compared with 429 in 1935–39 and 572 in 1940–45. The deaths during 1946–49 showed a decrease of 19 per cent. from the average of 1940–45 but were still 8 per cent. above the average for 1935–39. During 1948–49 there were in all 815 deaths from railway accidents, distributed as follows :—

	Civilians		Non-Civilians
	Males	Females	Males
Accidents to trains	43	26	11
Other accidents to occupants	45	15	5
Accidents on lines	610	54	6

Of 610 civilian males and 54 females killed on railway lines 472 men, or 77 per cent., and 46 women, or 85 per cent., were run over by trains. A total of 38 men and 11 women fell from the carriages of trains. Deaths classed as occupational numbered 378 among men and 2 among women ; 255 of the men were run over on railway lines. Further information will be found in Table 25, (Part I).

170, 171. Deaths caused by Motor and other Road Vehicles.—The average annual number of deaths attributed to motor vehicle accidents during 1935–39 was 5,671 ; during 1940–41 it increased to 7,378, but fell to 4,665 during 1942–45 ; for the period 1946–49 there was a further drop to 3,949. In 1948 and 1949 respectively the numbers of deaths caused by motor vehicle accidents were 3,638 and 3,892 of which 120 and 103 were deaths of non-civilians. Deaths due to tramway accidents on the roads, excluding collisions with motor vehicles, during the years 1939 to 1949 were 108, 177, 152, 112, 132, 95, 75, 59, 42, 48 and 33. Deaths from other road transport accidents involving neither a tram nor a motor-vehicle averaged 595 during 1935–39, 473 during 1940–45 and 300 during 1946–49. The downward trend in these deaths was not interrupted by the war years.

Table CXLI shows the death rates from accidents due to road motor vehicles by sex and age per million living from 1925 onwards. The rate for males at all ages which declined during 1931–36, increased again between 1937 and 1941. During 1942–48 a steady decrease occurred, interrupted only by an increase in 1944, which was reflected in every age group except 20–24 and 45–54, but in 1949 the rate increased by 11 per cent. over the 1948 figure to 139 per million. The rates for females began a downward trend about 1931 which has continued until 1949, interrupted only in 1941 and 1944 ; in the latter year there were increases in the rates for every age group shown in the table. The highest rates for both sexes occurred at ages 75 and over, while the persistently higher rates at ages 5–9 than those at ages 0–4 and 10–14 reinforce the need for training and supervision of young road users.

Table CXLI.—Death rates per Million living from All Accidents caused by Road Motor Vehicles, by Sex and Age, 1925–27, 1928–30, 1931–33, 1934–36, 1937–39, and each year 1940 to 1949*.

Age-group	1925–27	1928–30	1931–33	1934–36	1937–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
							MALES								
0–	107	142	143	135	121	146	181	160	113	126	140	119	95	108	102
5–	195	250	242	204	191	197	268	261	238	268	241	173	183	168	149
10–	102	132	106	105	103	116	139	102	96	118	109	109	75	63	80
15–	151	231	238	217	196	200	223	137	111	112	137	170	129	129	157
20–	233	365	393	386	384	325	340	218	134	129	213	232	220	167	233
25–	146	221	228	209	221	210	266	180	128	133	131	129	132	107	114
35–	112	147	142	144	156	182	203	140	116	124	95	102	102	77	102
45–	134	166	160	170	181	224	239	175	136	129	105	100	112	97	100
55–	170	239	228	220	273	364	367	239	187	202	146	161	147	142	137
65–	301	400	395	358	439	552	529	393	275	322	261	240	246	194	229
75 and over ..	490	738	711	672	777	946	863	628	447	492	406	498	460	400	451
All ages ..	**159**	**226**	**225**	**214**	**227**	**253**	**278**	**204**	**159**	**174**	**154**	**150**	**144**	**125**	**139**
							FEMALES								
0–	55	87	88	83	70	82	114	96	76	91	78	63	57	67	58
5–	92	129	133	112	89	101	149	117	96	133	114	81	88	93	73
10–	26	40	37	35	35	36	51	32	36	49	41	30	26	31	32
15–	32	50	52	61	58	55	55	34	33	36	34	36	35	24	32
20–	30	57	55	54	55	46	50	42	28	30	25	25	24	16	29
25–	22	31	33	33	31	32	38	33	21	27	22	21	17	14	10
35–	23	33	33	27	29	30	34	29	21	24	21	20	22	19	16
45–	36	57	53	47	47	49	55	38	30	33	30	27	33	21	22
55–	75	95	104	86	91	80	90	58	46	55	55	56	54	49	44
65–	140	190	186	185	190	151	151	116	83	100	89	100	100	101	95
75 and over ..	179	276	260	297	319	238	226	170	154	160	158	185	177	157	151
All ages ..	**48**	**71**	**72**	**69**	**69**	**64**	**74**	**56**	**45**	**54**	**49**	**47**	**46**	**43**	**41**

* Excluding non-civilians after 3rd September, 1939, for males and after 1st June, 1941, for females.

The figures for years before 1940 include all tramway accidents; those for 1940 onwards include only tramway accidents in which a motor vehicle was involved.

The rates at separate age groups for alternate years starting with 1941 are expressed below as percentages of the rates in 1938.

	0–	5–	10–	15–	20–	25–	35–	45–	55–	65–	75 and over	All Ages
Males												
1938 ..	100	100	100	100	100	100	100	100	100	100	100	**100**
1941 ..	132	141	126	113	89	121	145	156	161	146	140	**132**
1943 ..	82	125	87	56	35	58	83	89	82	76	73	**75**
1945 ..	102	127	99	69	55	60	68	69	64	72	66	**73**
1947 ..	69	96	68	65	57	60	73	73	64	68	75	**68**
1949 ..	74	78	73	79	61	52	73	65	60	63	73	**66**
Females												
1938 ..	100	100	100	100	100	100	100	100	100	100	100	**100**
1941 ..	156	173	150	106	125	127	142	128	106	83	70	**116**
1943 ..	104	112	106	63	70	70	88	70	54	46	47	**70**
1945 ..	107	133	121	65	63	73	87	70	65	49	49	**77**
1947 ..	78	102	76	67	60	57	92	77	64	55	54	**72**
1949 ..	79	85	94	62	73	33	67	51	52	52	46	**64**

Table CXLII.—Deaths, including those of non-civilians, caused by Road Accidents involving Various Types of Vehicles, 1940–49.

List No.	Nature of Accident	Sex	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
170c. (part)	*Motor vehicle accident causing death of pedestrian by :—*											
	Motor cycle	M.	161	151	134	70	72	48	104	92	59	87
		F.	56	83	54	34	44	38	48	54	48	62
	Motor goods vehicle(1) ..	M.	955	1,100	950	792	956	703	517	507	503	496
		F.	397	500	439	386	481	355	251	265	307	267
	Motor bus, trolley bus ..	M.	677	728	587	466	437	287	248	239	228	190
		F.	193	223	225	187	194	157	150	136	134	90
	Motor car, coach(2) ..	M.	1,124	1,062	488	355	390	398	515	481	401	448
		F.	352	343	158	136	178	211	256	255	225	255
	Other road motor vehicle(3) (including collision unspecified)	M.	46	57	31	35	50	18	20	20	19	6
		F.	15	8	18	13	14	12	9	2	6	6
170c. (part)	*Motor vehicle non-collision accident causing death of occupant or rider of :—*											
	Motor cycle	M.	283	316	244	155	129	145	287	253	210	261
		F.	19	15	14	—	4	8	19	24	12	24
	Motor goods vehicle(1) ..	M.	240	338	308	282	289	224	187	131	124	140
		F.	8	16	24	13	15	23	11	12	11	10
	Motor bus, trolley bus ..	M.	60	85	67	80	43	56	43	38	43	43
		F.	26	57	58	40	47	59	32	38	35	23
	Motor car, coach(2) ..	M.	135	132	69	65	49	101	110	133	60	82
		F.	54	49	27	16	14	37	55	57	25	23
	Other road motor vehicle(3)	M.	4	12	5	14	12	8	9	7	8	4
		F.	1	—	—	3	7	3	2	2	5	—
170a.	*Collision between motor vehicle and train, causing death of :—*											
	Motor cyclist	M.	—	1	—	—	1	—	3	—	1	—
		F.	—	—	—	—	—	—	—	—	1	—
	Occupant of motor vehicle	M.	4	17	6	21	10	20	5	19	17	5
		F.	—	1	—	4	1	1	—	2	1	—
	Passenger or other person	M.	—	4	—	—	—	2	1	—	1	2
		F.	1	1	—	—	—	—	—	—	—	—
170b.	*Collision between motor vehicle and tramcar, causing death of :—*											
	Motor cyclist	M.	1	3	2	1	1	—	—	—	1	2
		F.	—	—	—	—	—	—	—	—	—	—
	Occupant of motor vehicle	M.	1	1	4	2	3	—	—	—	3	1
		F.	—	1	—	—	2	—	—	1	—	—
	Tram passenger or other person	M.	—	1	—	—	1	—	1	—	—	—
		F.	—	—	—	—	—	—	—	—	—	—
170c. (part)	*Other collision involving a motor vehicle causing death of :—*											
	Pedal cyclist by—											
	Motor cycle	M.	35	33	34	20	20	14	20	13	13	17
		F.	2	5	2	1	3	2	5	1	4	1
	Motor goods vehicle(1) ..	M.	340	326	280	238	324	229	200	187	192	197
		F.	70	87	68	75	105	56	42	30	43	43
	Motor bus, trolley bus ..	M.	95	104	86	83	69	69	56	61	78	72
		F.	14	18	20	11	19	17	12	9	11	6
	Motor car, coach(2) ..	M.	274	262	161	100	129	153	200	154	176	200
		F.	59	59	39	34	40	29	37	40	27	28
	Other road motor vehicle(3)	M.	8	9	6	7	20	10	5	2	2	4
		F.	—	1	1	1	4	3	1	1	1	—
	Motor cyclist	M.	811	883	512	272	306	286	391	443	308	482
		F.	23	37	19	13	8	17	27	38	13	33
	Occupant of—											
	Motor goods vehicle(1) ..	M.	139	185	130	120	147	105	68	74	76	68
		F.	9	15	10	8	11	8	5	1	5	2
	Motor bus, trolley bus ..	M.	15	23	14	10	7	8	7	10	9	8
		F.	9	4	13	5	3	3	2	6	2	—
	Motor car, coach(2) ..	M.	217	257	110	62	88	121	130	137	113	128
		F.	86	84	46	13	25	52	69	61	56	52
	Other road motor vehicle(3)	M.	3	2	4	2	3	4	5	9	6	9
		F.	—	—	2	—	—	2	—	—	—	2
	Non-motor road vehicle(4) (except tramcar, pedal cycle)	M.	14	17	9	5	9	11	5	12	2	5
		F.	1	4	3	1	3	—	2	1	1	—

Table CXLII—*continued*

List No.	Nature of Accident	Sex	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
170c. (part)	*Ill-defined motor vehicle accident causing death of* other or unspecified person(5)	M.	—	—	—	—	9	17	21	13	12	8
		F.	—	—	—	—	—	1	—	—	—	—
	TOTAL motor road vehicle fatalities	**M.**	**5,642**	**6,109**	**4,241**	**3,257**	**3,574**	**3,037**	**3,158**	**3,035**	**2,665**	**2,965**
		F.	**1,395**	**1,611**	**1,240**	**994**	**1,222**	**1,094**	**1,035**	**1,036**	**973**	**927**
171	*Road transport accidents involving only non-motor vehicle(s) causing death of :—*											
	Pedestrian by—											
	Tramcar	M.	120	94	67	70	51	33	19	17	26	9
		F.	28	29	26	32	24	21	22	12	11	13
	Pedal cycle	M.	109	79	67	68	57	34	41	45	54	45
		F.	55	46	28	39	26	30	14	33	31	36
	Other non-motor vehicle (4)	M.	27	48	45	40	48	28	22	15	9	13
		F.	2	8	11	11	7	13	6	5	3	6
	Pedal cyclist by—											
	No other vehicle ..	M.	245	222	222	242	208	168	141	143	140	149
		F.	42	33	53	63	37	39	27	24	24	27
	Tramcar	M.	2	—	—	2	1	—	2	3	—	2
		F.	1	—	—	—	—	1	1	—	1	—
	Other non-motor vehicle (4)	M.	15	15	21	15	21	14	16	14	18	20
		F.	3	3	4	7	8	8	2	1	5	1
	Occupant of tramcar ..	M.	15	18	14	13	7	9	10	7	6	6
		F.	5	9	3	13	7	7	5	3	3	3
	Occupant of other non-motor vehicle (4)	M.	31	30	41	37	35	33	14	21	14	12
		F.	2	3	4	3	5	3	3	1	2	2
	TOTAL non-motor road vehicle fatalities	**M.**	**564**	**506**	**477**	**487**	**428**	**319**	**265**	**265**	**267**	**256**
		F.	**138**	**131**	**129**	**168**	**114**	**122**	**80**	**79**	**80**	**88**
170 and 171	Total pedestrians	M.	3,219	3,319	2,369	1,896	2,061	1,549	1,486	1,416	1,299	1,294
		F.	1,098	1,241	959	838	968	837	756	762	765	735
	Total pedal cyclists ..	M.	1,014	971	810	707	792	657	640	577	619	661
		F.	191	206	187	192	216	155	127	106	116	106
	Total motor cyclists ..	M.	1,095	1,203	758	428	437	431	681	696	520	745
		F.	42	52	33	13	12	25	46	62	26	57
	Total occupants of motor vehicles (except cycles)	M.	818	1,052	717	658	651	647	564	558	459	488
		F.	193	227	180	102	125	188	176	180	140	112
	Total occupants of non-motor vehicles	M.	60	70	64	55	52	54	30	40	22	23
		F.	9	16	10	17	15	10	10	5	6	5
	Total other or unspecified persons	M.	—	—	—	—	9	18	22	13	13	10
		F.	—	—	—	—	—	1	—	—	—	—

(1) " Motor goods vehicle " includes road motor vehicles not primarily used for conveying people, e.g., van, lorry, tractor, fire-engine.

(2) " Motor car, coach " includes taxi-cab, motor car unspecified.

(3) " Other road motor vehicle " includes vehicles used for conveying people which are not included in the other motor vehicle categories of this table, e.g., ambulance, motor hearse, invalid carriage. It also includes motor vehicle unspecified.

(4) " Other non-motor vehicle " includes animal-drawn vehicle, wheel chair, non-motor vehicle unspecified and vehicle unspecified.

(5) This category was not used until 1944. Before that date such deaths were assigned to other categories in this table according to the limited information available.

Table CXLII shows the numbers of deaths due to road vehicle accidents according to the type of vehicle involved and whether the victim was a pedestrian, pedal or motor cyclist or occupant of a motor vehicle or a non-motor vehicle ; non-civilian deaths are included in this table.

There were 123 male non-civilians killed in road transport accidents in 1948 and 105 in 1949, compared with 368 and 223 in 1946 and 1947. Of the total of 819 deaths in the four years 1946–49, 35 per cent. were motor cyclists and 40 per cent. were occupants of other road motor vehicles.

The following table compares the percentage distribution of deaths (civilians and non-civilians combined) according to the type of person killed, for 1937–38, 1944–45, 1946–47 and 1948–49.

Persons Killed	MALES				FEMALES			
	1937–38	1944–45	1946–47	1948–49	1937–38	1944–45	1946–47	1948–49
Pedestrians	41	48	43	42	69	71	68	72
Pedal cyclists	23	20	18	21	12	15	10	11
Motor cyclists	22	12	20	21	6	1	5	4
Occupants of motor vehicles	14	18	17	15	13	12	16	12
Occupants of non-motor vehicles, others, and not stated		2	2	1		1	1	1
Total number of deaths	8,916	7,358	6,723	6,153	2,987	2,552	2,230	2,068

The proportion of male pedestrian fatalities differed little during 1946–49 from that in 1937–38, while the proportion of female pedestrians was higher in 1948–49 than in 1946–47. The proportion of motor cyclists killed in the post-war years showed little difference from 1937–38, while that of pedal cyclists showed an increase for both sexes in 1948–49 over 1946–47.

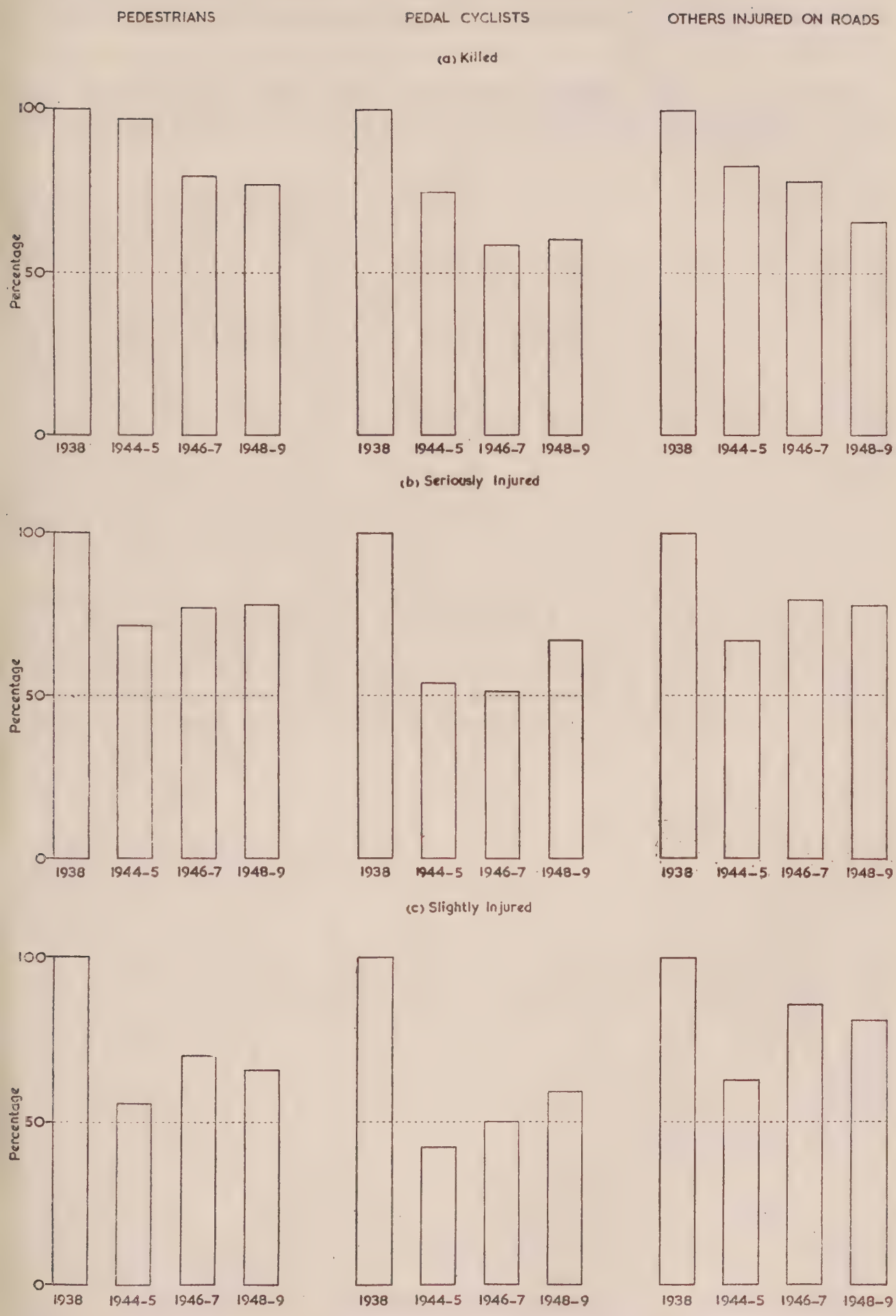
The number of accidents on the roads is partly dependent on the number of vehicles being driven ; further, a reduction or increase in the number of deaths should be considered in relation to the number of non-fatal accidents. The following table compiled from the Annual Abstract of Statistics No. 87, 1938–49, issued by the Central Office of Information, shows the number of vehicles licensed and the numbers of accidents to pedestrians, pedal cyclists and others occurring on the roads. These figures are for Great Britain as a whole but since it is unlikely that the pattern of accidents in Scotland will differ significantly from that in England and Wales, they are quoted for the sake of comparison.

Type of Person Injured	Actual Numbers				Proportions			
	1938	1944–5 (1)	1946–7 (1)	1948–9 (1)	1938	1944–5	1946–7	1948–9
Pedestrians :								
Killed	3,046	2,958	2,435	2,346	100	97	80	77
Seriously injured	16,360	11,846	12,547	12,832	100	72	77	78
Slightly injured	57,833	32,316	40,625	37,960	100	56	70	66
Pedal Cyclists :								
Killed	1,401	1,051	822	834	100	75	59	60
Seriously injured	13,519	7,258	6,945	9,102	100	54	51	67
Slightly injured	52,208	21,884	25,872	30,702	100	42	50	59
Others :								
Killed	2,201	1,826	1,714	1,462	100	83	78	66
Seriously injured	20,903	13,911	16,649	16,304	100	67	80	78
Slightly injured	65,888	41,534	56,761	53,543	100	63	86	81
Vehicles with licences current (2) (*thousands*)	3,094	2,079	3,317	3,923	100	67	107	127

(1) Average for the two years.

(2) Licences current at any time during the September quarter for 1938, 1946–49 ; figures for 1944–45 relate to August 31st.

Diagram 11



Persons killed or injured in road accidents in Great Britain in 1944–49 in relation to similar numbers in 1938.

Diagram 11 shows that, in Great Britain as a whole, the progressive reduction in deaths during 1944–49 compared with the number in 1938 has not been accompanied by similar trends in the numbers of seriously or slightly injured victims of road accidents.

Reverting to deaths registered in England and Wales, the following table shows the percentage distribution of deaths of pedestrians and of pedal cyclists according to the type of vehicle involved.

Vehicle involved	PERSONS KILLED							
	Pedestrians				Pedal cyclists			
	1937–38	1944–45	1946–47	1948–49	1937–38	1944–45	1946–47	1948–49
Motor cycle	7	4	7	6	3	2	3	2
Motor goods vehicles	28	46	35	38	25	39	31	32
Motor bus	10	20	17	16	0	10	10	11
Motor car, coach	46	22	34	33	40	19	30	29
Other motor vehicles	1	2	1	1	8	2	1	0
Tramcar	} 8	2	2	1	} 24	0	0	0
Pedal cycle (only)		3	3	4		25	23	23
Other non-motor vehicles		2	1	1		3	2	3
Total deaths	5,680	5,415	4,420	4,093	2,430	1,820	1,450	1,502

Whereas in 1937–38 motor cars and coaches were the vehicles most frequently involved in fatal accidents to both pedestrians and pedal cyclists (46 per cent. for pedestrians and 40 per cent. for pedal cyclists), in 1944–49 motor goods vehicles were more commonly involved. Both during 1937–38 and 1944–49, about a quarter of the deaths of pedal cyclists did not involve any other type of vehicle. A similar analysis of the deaths of motor cyclists shows that roughly

Vehicles involved	Motor Cyclists			
	1937–38	1944–45	1946–47	1948–49
Motor cycle alone	} 39	32	40	38
Other motor cycle		3	3	5
Motor goods vehicle	20	41	24	30
Motor bus	5	6	6	5
Motor car, coach	32	15	26	21
Other road motor vehicle	?	1	0	1
Tramcar	?	0	—	0
Pedal cycle	2	2	1	—
Other non-motor vehicles	?	0	0	0
Collision, vehicle unspecified	2	0	0	0
Total Deaths	2,160	905	1,485	1,348

two-fifths of the deaths in 1946–49 involved no other vehicle ; this is rather more than the proportion in 1937–38. As in the cases of pedestrians and pedal cyclists, the proportion of deaths involving motor cars or coaches was less in 1944–49 than in 1937–38, while that involving motor goods vehicles was greater.

Table CXLIII(i).—Deaths of Pedestrians, Pedal Cyclists, Motor Cyclists, and Occupants of Vehicles in Road Transport Accidents, according to Sex, class of Area of residence and Vehicle involved. 1948.

Area of residence and type of vehicle and accident	Pedestrian		Pedal cyclist		Motor cyclist		Occupants of road motor vehicles†		Occupants of non-motor vehicles‡		Other or unspecified persons		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
England and Wales (civilians)														
Motor vehicle, non-collision‖														
Motor cycle	51	48	—	—	195	12	—	—	—	—	—	—	246	60
Motor goods vehicle	502	307	—	—	—	—	105	11	—	—	—	—	607	318
Motor bus, trolley bus	227	134	—	—	—	—	42	35	—	—	—	—	269	169
Motor car, coach	395	225	—	—	—	—	59	25	—	—	—	—	454	250
Other road motor vehicle	14	6	—	—	—	—	3	4	—	—	—	—	17	10
*Collision involving motor vehicle**														
With train	—	—	—	—	1	1	12	1	—	—	—	—	13	2
With tram	—	—	—	—	1	—	2	—	—	—	—	—	3	—
Motor cycle	§	§	13	4	24	—	—	—	—	—	—	—	37	4
Motor goods vehicle	§	§	189	43	148	7	63	5	2	—	—	—	402	55
Motor bus, trolley bus	§	§	77	11	27	1	9	2	—	—	—	—	113	14
Motor car, coach	§	§	171	27	82	4	107	55	—	—	—	—	360	86
Other road motor vehicle	§	§	1	—	5	—	5	—	—	—	—	—	11	—
Ill-defined motor vehicle accident	—	—	1	1	1	—	1	—	—	—	12	—	15	1
Non-motor vehicle(s) only														
Tram	26	11	—	1	—	—	—	—	6	4	—	—	32	16
Pedal cycle	52	31	137	24	—	—	—	—	—	—	—	—	189	55
Other non-motor vehicle	9	3	17	5	—	—	—	—	15	2	—	—	41	10
Total	**1,276**	**765**	**606**	**116**	**484**	**25**	**408**	**138**	**23**	**6**	**12**	—	**2,809**	**1,050**
Greater London residents														
Motor vehicle, non-collision‖														
Motor cycle	8	10	—	—	24	2	—	—	—	—	—	—	32	12
Motor goods vehicle	69	57	—	—	—	—	13	1	—	—	—	—	82	58
Motor bus, trolley bus	42	28	—	—	—	—	2	2	—	—	—	—	44	30
Motor car, coach	78	52	—	—	—	—	8	6	—	—	—	—	86	58
Other road motor vehicle	2	1	—	—	—	—	—	1	—	—	—	—	2	2
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	1	—	—	—	—	—	1	—
With tram	—	—	—	—	1	—	—	—	—	—	—	—	1	—
Motor cycle	§	§	5	1	4	—	—	—	—	—	—	—	9	1
Motor goods vehicle	§	§	35	5	16	4	6	1	—	—	—	—	57	10
Motor bus, trolley bus	§	§	13	—	2	—	1	—	—	—	—	—	16	—
Motor car, coach	§	§	27	2	14	—	21	10	—	—	—	—	62	12
Other road motor vehicle	§	§	—	—	—	—	2	—	—	—	—	—	2	—
Ill-defined motor vehicle accident	—	—	1	—	—	—	—	—	—	—	3	—	4	—
Non-motor vehicle(s) only														
Tram	7	4	—	1	—	—	—	—	3	2	—	—	10	7
Pedal cycle	8	10	18	4	—	—	—	—	—	—	—	—	26	14
Other non-motor vehicle	2	—	1	1	—	—	—	—	2	—	—	—	5	1
Total	**216**	**162**	**100**	**14**	**61**	**6**	**54**	**21**	**5**	**2**	**3**	—	**439**	**205**
County Borough residents¶														
Motor vehicle, non-collision‖														
Motor cycle	8	12	—	—	42	3	—	—	—	—	—	—	50	15
Motor goods vehicle	186	99	—	—	—	—	26	2	—	—	—	—	212	101
Motor bus, trolley bus	93	53	—	—	—	—	11	8	—	—	—	—	104	61
Motor car, coach	134	67	—	—	—	—	15	5	—	—	—	—	149	72
Other road motor vehicle	4	1	—	—	—	—	2	—	—	—	—	—	6	1
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	1	1	—	—	—	—	1	1
With tram	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Motor cycle	§	§	2	—	5	—	—	—	—	—	—	—	7	—
Motor goods vehicle	§	§	47	16	20	1	22	3	1	—	—	—	90	20
Motor bus, trolley bus	§	§	31	3	6	—	4	1	—	—	—	—	41	4
Motor car, coach	§	§	36	6	16	—	26	11	—	—	—	—	78	17
Other road motor vehicle	§	§	—	—	1	—	1	—	—	—	—	—	2	—
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	3	—	3	—
Non-motor vehicle(s) only														
Tram	18	6	—	—	—	—	—	—	3	1	—	—	21	7
Pedal cycle	15	9	24	5	—	—	—	—	—	—	—	—	39	14
Other non-motor vehicle	5	3	3	2	—	—	—	—	1	—	—	—	9	5
Total	**463**	**250**	**143**	**32**	**90**	**4**	**109**	**31**	**5**	**1**	**3**	—	**813**	**318**

Table CXLIII(i)—*continued.*

Area of residence and type of vehicle and accident	Pedestrian		Pedal cyclist		Motor cyclist		Occupants of road motor vehicles†		Occupants of non-motor vehicles‡		Other or unspecified persons		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Urban District residents¶														
Motor vehicle, non-collision‖														
Motor cycle	22	17	—	—	64	3	—	—	—	—	—	—	86	20
Motor goods vehicle	156	91	—	—	—	—	32	4	—	—	—	—	188	95
Motor bus, trolley bus	62	35	—	—	—	—	15	14	—	—	—	—	77	49
Motor car, coach	116	70	—	—	—	—	21	9	—	—	—	—	137	79
Other road motor vehicle	5	—	—	—	—	—	1	2	—	—	—	—	6	2
*Collision involving motor vehicle**														
With train	—	—	—	—	1	1	6	—	—	—	—	—	7	1
With tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor cycle	§	§	3	2	8	—	—	—	—	—	—	—	11	2
Motor goods vehicle	§	§	53	13	40	1	22	1	1	—	—	—	116	15
Motor bus, trolley bus	§	§	18	7	13	—	2	1	—	—	—	—	33	8
Motor car, coach	§	§	39	6	24	—	38	20	—	—	—	—	101	26
Other road motor vehicle	§	§	—	—	2	—	—	—	—	—	—	—	2	—
Ill-defined motor vehicle accident	—	—	—	1	1	—	1	—	—	—	2	—	4	1
Non-motor vehicle(s) only														
Tram	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Pedal cycle	14	9	42	4	—	—	—	—	—	—	—	—	56	13
Other non-motor vehicle	—	—	2	1	—	—	—	—	5	1	—	—	7	2
Total	**376**	**223**	**157**	**34**	**153**	**5**	**138**	**51**	**6**	**1**	**2**	**—**	**832**	**314**
Rural District residents¶														
Motor vehicle, non-collision‖	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor cycle	13	9	—	—	65	4	—	—	—	—	—	—	78	13
Motor goods vehicle	91	60	—	—	—	—	34	4	—	—	—	—	125	64
Motor bus, trolley bus	30	18	—	—	—	—	14	11	—	—	—	—	44	29
Motor car, coach	67	36	—	—	—	—	15	5	—	—	—	—	82	41
Other road motor vehicle	3	4	—	—	—	—	—	1	—	—	—	—	3	5
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	4	—	—	—	—	—	4	—
With tram	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Motor cycle	§	§	3	1	7	—	—	—	—	—	—	—	10	1
Motor goods vehicle	§	§	54	9	72	1	13	—	—	—	—	—	139	10
Motor bus, trolley bus	§	§	15	1	6	1	2	—	—	—	—	—	23	2
Motor car, coach	§	§	69	13	28	4	22	14	—	—	—	—	119	31
Other road motor vehicle	§	§	1	—	2	—	2	—	—	—	—	—	5	—
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	4	—	4	—
Non-motor vehicle(s) only														
Tram	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Pedal cycle	15	3	53	11	—	—	—	—	—	—	—	—	68	14
Other non-motor vehicle	2	—	11	1	—	—	—	—	7	1	—	—	20	2
Total	**221**	**130**	**206**	**36**	**180**	**10**	**107**	**35**	**7**	**2**	**4**	**—**	**725**	**213**
England and Wales (non-civilians)														
Motor vehicle, non-collision‖														
Motor cycle	8	—	—	—	15	—	—	—	—	—	—	—	23	—
Motor goods vehicle	1	—	—	—	—	—	19	—	—	—	—	—	20	—
Motor bus, trolley bus	1	—	—	—	—	—	1	—	—	—	—	—	2	—
Motor car, coach	8	—	—	—	—	—	1	—	—	—	—	—	9	—
Other road motor vehicle	3	—	—	—	—	—	4	1	—	—	—	—	7	1
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	6	—	—	—	—	—	6	—
With tram	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Motor cycle	§	§	—	—	1	—	—	—	—	—	—	—	1	—
Motor goods vehicle	§	§	3	—	10	—	13	—	—	—	—	—	26	—
Motor bus, trolley bus	§	§	1	—	1	—	—	—	—	—	—	—	2	—
Motor car, coach	§	§	5	—	8	1	6	1	—	—	—	—	19	2
Other road motor vehicle	§	§	1	—	1	—	—	—	—	—	—	—	2	—
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Non-motor vehicle(s) only														
Tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedal cycle	2	—	3	—	—	—	—	—	—	—	—	—	5	—
Other non-motor vehicle	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	**23**	**—**	**13**	**—**	**36**	**1**	**51**	**2**	**—**	**—**	**—**	**—**	**123**	**3**

* No death is entered in more than one of these categories. Collisions of any motor vehicle with a train or tram are entered in the first two categories; collisions with other type of non-motor vehicle are in the last five categories; deaths of pedal cyclists and motor cyclists in collision with more than one other motor vehicle appear against the vehicle at fault in the collision.

† Except motor cyclists. ‡ Except pedal cyclists. § Included above under "non-collision."

‖ Includes a few deaths of pedestrians resulting from collisions. ¶ Outside Greater London.

See definitions under Table CXLII.

Table CXLIII(ii).—Deaths of Pedestrians, Pedal Cyclists, Motor Cyclists, and Occupants of Vehicles in Road Transport Accidents, according to Sex, class of Area of residence and Vehicle involved. 1949.

Area of residence and type of vehicle and accident	Pedestrian		Pedal cyclist		Motor cyclist		Occupants of road motor vehicles†		Occupants of non-motor vehicles‡		Other or unspecified persons		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
England and Wales (civilians)														
Motor vehicle, non-collision‖														
Motor cycle	86	62	—	—	246	24	—	—	—	—	—	—	332	86
Motor goods vehicle	492	267	—	—	—	—	122	9	—	—	—	—	614	276
Motor bus, trolley bus	190	90	—	—	—	—	43	22	—	—	—	—	233	112
Motor car, coach	444	255	—	—	—	—	80	23	—	—	—	—	524	278
Other road motor vehicle	6	6	—	—	—	—	2	—	—	—	—	—	8	6
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	7	—	—	—	—	—	7	—
With tram	—	—	—	—	2	—	1	—	—	—	—	—	3	—
Motor cycle	§	§	17	1	40	5	—	—	—	—	—	—	57	6
Motor goods vehicle	§	§	196	43	208	12	55	2	2	—	—	—	461	57
Motor bus, trolley bus	§	§	70	6	37	2	8	—	3	—	—	—	118	8
Motor car, coach	§	§	197	28	161	14	123	51	—	—	—	—	481	93
Other road motor vehicle	§	§	2	—	4	—	8	1	—	—	—	—	14	1
Ill-defined motor vehicle accident	—	—	2	—	2	—	1	1	—	—	8	—	13	1
Non-motor vehicle(s) only														
Tram	9	13	2	—	—	—	—	—	6	3	—	—	17	16
Pedal cycle	45	36	144	27	—	—	—	—	—	—	—	—	189	63
Other non-motor vehicle	13	6	20	1	—	—	—	—	12	2	—	—	45	9
Total	**1,285**	**735**	**650**	**106**	**700**	**57**	**450**	**109**	**23**	**5**	**8**	**—**	**3,116**	**1,012**
Greater London residents														
Motor vehicle, non-collision‖														
Motor cycle	14	18	—	—	26	3	—	—	—	—	—	—	40	21
Motor goods vehicle	76	55	—	—	—	—	16	2	—	—	—	—	92	57
Motor bus, trolley bus	21	13	—	—	—	—	7	3	—	—	—	—	28	16
Motor car, coach	80	48	—	—	—	—	13	4	—	—	—	—	93	52
Other road motor vehicle	1	2	—	—	—	—	1	—	—	—	—	—	2	2
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	1	—	—	—	—	—	1	—
With tram	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Motor cycle	§	§	3	—	5	—	—	—	—	—	—	—	8	—
Motor goods vehicle	§	§	40	6	22	3	13	—	—	—	—	—	75	9
Motor bus, trolley bus	§	§	12	1	5	1	—	—	—	—	—	—	17	2
Motor car, coach	§	§	37	1	21	3	18	4	—	—	—	—	76	8
Other road motor vehicle	§	§	—	—	—	—	1	—	—	—	—	—	1	—
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	2	—	2	—
Non-motor vehicle(s) only														
Tram	2	4	—	—	—	—	—	—	—	1	—	—	2	5
Pedal cycle	7	7	17	4	—	—	—	—	—	—	—	—	24	11
Other non-motor vehicle	1	—	1	—	—	—	—	—	2	—	—	—	4	—
Total	**202**	**147**	**110**	**12**	**79**	**10**	**71**	**13**	**2**	**1**	**2**	**—**	**466**	**183**
County Borough residents¶														
Motor vehicle, non-collision‖														
Motor cycle	23	19	—	—	48	6	—	—	—	—	—	—	71	25
Motor goods vehicle	179	88	—	—	—	—	28	1	—	—	—	—	207	89
Motor bus, trolley bus	83	45	—	—	—	—	12	8	—	—	—	—	95	53
Motor car, coach	132	89	—	—	—	—	15	4	—	—	—	—	147	93
Other road motor vehicle	—	1	—	—	—	—	—	—	—	—	—	—	—	1
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	—	—	—	—	—	—	—	—
With tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor cycle	§	§	4	—	5	1	—	—	—	—	—	—	9	1
Motor goods vehicle	§	§	51	15	42	5	16	1	1	—	—	—	110	21
Motor bus, trolley bus	§	§	26	3	11	—	3	—	—	—	—	—	40	3
Motor car, coach	§	§	38	7	38	2	37	11	—	—	—	—	113	20
Other road motor vehicle	§	§	—	—	1	—	2	—	—	—	—	—	3	—
Ill-defined motor vehicle accident	—	—	1	—	—	—	—	1	—	—	—	—	1	1
Non-motor vehicle(s) only														
Tram	6	8	2	—	—	—	—	—	6	2	—	—	14	10
Pedal cycle	15	14	29	5	—	—	—	—	—	—	—	—	44	19
Other non-motor vehicle	6	2	5	—	—	—	—	—	5	—	—	—	16	2
Total	**444**	**266**	**156**	**30**	**145**	**14**	**113**	**26**	**12**	**2**	**—**	**—**	**870**	**338**

Table CXLIII(ii)—*continued.*

Area of residence and type of vehicle and accident	Pedestrian		Pedal cyclist		Motor cyclist		Occupants of road motor vehicles†		Occupants of non-motor vehicles‡		Other or unspecified persons		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Urban District residents¶														
Motor vehicle, non-collision‖														
Motor cycle	21	13	—	—	83	7	—	—	—	—	—	—	104	20
Motor goods vehicle	157	80	—	—	—	—	38	2	—	—	—	—	195	82
Motor bus, trolley bus	63	21	—	—	—	—	16	5	—	—	—	—	79	26
Motor car, coach	148	68	—	—	—	—	22	7	—	—	—	—	170	75
Other road motor vehicle	3	1	—	—	—	—	—	—	—	—	—	—	3	1
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	2	—	—	—	—	—	2	—
With tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor cycle	§	§	7	1	16	2	—	—	—	—	—	—	23	3
Motor goods vehicle	§	§	64	15	55	2	17	—	—	—	—	—	136	17
Motor bus, trolley bus	§	§	22	2	10	—	4	—	2	—	—	—	38	2
Motor car, coach	§	§	61	9	40	6	41	22	—	—	—	—	142	37
Other road motor vehicle	§	§	2	—	—	—	3	1	—	—	—	—	5	1
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	2	—	2	—
Non-motor vehicle(s) only														
Tram	1	1	—	—	—	—	—	—	—	—	—	—	1	1
Pedal cycle	15	8	44	8	—	—	—	—	—	—	—	—	59	16
Other non-motor vehicle	2	3	7	1	—	—	—	—	3	1	—	—	12	5
Total	**410**	**195**	**207**	**36**	**204**	**17**	**143**	**37**	**5**	**1**	**2**	—	**971**	**286**
Rural District residents¶														
Motor vehicle, non-collision‖														
Motor cycle	28	12	—	—	89	8	—	—	—	—	—	—	117	20
Motor goods vehicle	80	44	—	—	—	—	40	4	—	—	—	—	120	48
Motor bus, trolley bus	23	11	—	—	—	—	8	6	—	—	—	—	31	17
Motor car, coach	84	50	—	—	—	—	30	8	—	—	—	—	114	58
Other road motor vehicle	2	2	—	—	—	—	1	—	—	—	—	—	3	2
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	4	—	—	—	—	—	4	—
With tram	—	—	—	—	2	—	—	—	—	—	—	—	2	—
Motor cycle	§	§	3	—	14	2	—	—	—	—	—	—	17	2
Motor goods vehicle	§	§	41	7	89	2	9	1	1	—	—	—	140	10
Motor bus, trolley bus	§	§	10	—	11	1	1	—	1	—	—	—	23	1
Motor car, coach	§	§	61	11	62	3	27	14	—	—	—	—	150	28
Other road motor vehicle	§	§	—	—	3	—	2	—	—	—	—	—	5	—
Ill-defined motor vehicle accident	—	—	1	—	2	—	1	—	—	—	4	—	8	—
Non-motor vehicle(s) only														
Tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedal cycle	8	7	54	10	—	—	—	—	—	—	—	—	62	17
Other non-motor vehicle	4	1	7	—	—	—	—	—	2	1	—	—	13	2
Total	**229**	**127**	**177**	**28**	**272**	**16**	**123**	**33**	**4**	**1**	**4**	—	**809**	**205**
England and Wales (non civilians)														
Motor vehicle, non-collision‖														
Motor cycle	1	—	—	—	15	—	—	—	—	—	—	—	16	—
Motor goods vehicle	4	—	—	—	—	—	18	1	—	—	—	—	22	1
Motor bus, trolley bus	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Motor car, coach	4	—	—	—	—	—	2	—	—	—	—	—	6	—
Other road motor vehicle	—	—	—	—	—	—	2	—	—	—	—	—	2	—
*Collision involving motor vehicle**														
With train	—	—	—	—	—	—	—	—	—	—	—	—	—	—
With tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Motor cycle	§	§	—	—	1	—	—	—	—	—	—	—	1	—
Motor goods vehicle	§	§	1	—	21	—	13	—	—	—	—	—	35	—
Motor bus, trolley bus	§	§	2	—	4	—	—	—	—	—	—	—	6	—
Motor car, coach	§	§	3	—	4	—	5	1	—	—	—	—	12	1
Other road motor vehicle	§	§	—	—	—	—	—	—	—	—	—	—	—	—
Ill-defined motor vehicle accident	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Non-motor vehicle(s) only														
Tram	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedal cycle	—	—	5	—	—	—	—	—	—	—	—	—	5	—
Other non-motor vehicle	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	**9**	—	**11**	—	**45**	—	**40**	**3**	—	—	—	—	**105**	**3**

* No death is entered in more than one of these categories. Collisions of any motor vehicle with a train or tram are entered in the first two categories; collisions with other type of non-motor vehicle are in the last five categories; deaths of pedal cyclists and motor cyclists in collision with more than one other motor vehicle appear against the vehicle at fault in the collision.

† Except motor cyclists. ‡ Except pedal cyclists. § Included above under "non-collision."

‖ Includes a few deaths of pedestrians resulting from collisions. ¶ Outside Greater London.

See definitions under Table CXLII.

Table CXLIII analyses for 1948 and 1949 the numbers of deaths in road transport accidents according to various classes of road user and according to place of residence of civilians. The following table expresses the numbers of deaths of different classes of road user and the numbers of deaths due to different types of accident in 1948–49 as percentages of the total road transport deaths relating to residents of each class of area.

Place of residence		Pedestrians	Pedal cyclists	Motor cyclists	Occupants of road motor vehicles	Occupants of non-motor vehicles	Other and unspecified persons	Total
Civilian Males :								
England and Wales	*Number*	**2,561**	**1,256**	**1,184**	**858**	**46**	**20**	**5,925**
	Percentage	*43*	*21*	*20*	*15*	*1*	*0*	*100*
Greater London ..	*Number*	418	210	140	125	7	5	**905**
	Percentage	*46*	*23*	*15*	*14*	*1*	*1*	*100*
County boroughs*	*Number*	907	299	235	222	17	3	**1,683**
	Percentage	*54*	*18*	*14*	*13*	*1*	*0*	*100*
Urban districts* ..	*Number*	786	364	357	281	11	4	**1,803**
	Percentage	*43*	*20*	*20*	*16*	*1*	*0*	*100*
Rural districts* ..	*Number*	450	383	452	230	11	8	**1,534**
	Percentage	*29*	*25*	*29*	*15*	*1*	*1*	*100*
Civilian Females :								
England and Wales	*Number*	**1,500**	**222**	**82**	**247**	**11**	—	**2,062**
	Percentage	*72*	*11*	*4*	*12*	*1*	—	*100*
Greater London ..	*Number*	309	26	16	34	3	—	**388**
	Percentage	*79*	*7*	*4*	*9*	*1*	—	*100*
County boroughs*	*Number*	516	62	18	57	3	—	**656**
	Percentage	*79*	*9*	*3*	*9*	*0*	—	*100*
Urban districts*	*Number*	418	70	22	88	2	—	**600**
	Percentage	*69*	*12*	*4*	*15*	*0*	—	*100*
Rural districts* ..	*Number*	257	64	26	68	3	—	**418**
	Percentage	*62*	*15*	*6*	*16*	*1*	—	*100*
Non-Civilian Males :								
England and Wales	*Number*	32	24	81	91	—	—	**228**
	Percentage	*14*	*11*	*35*	*40*	—	—	*100*

		Motor vehicle non-collision	Collision involving motor vehicles	Ill-defined motor vehicle accident	Non-motor vehicles only	Total
Civilian Males :						
County boroughs*	*Number*	1,041	495	4	143	**1,683**
	Percentage	*62*	*30*	*0*	*8*	*100*
Urban districts*	*Number*	1,045	616	6	136	**1,803**
	Percentage	*58*	*34*	*0*	*8*	*100*
Rural districts*	*Number*	717	642	12	163	**1,534**
	Percentage	*46*	*42*	*1*	*11*	*100*
Civilian Females :						
County boroughs*	*Number*	511	87	1	57	**656**
	Percentage	*78*	*13*	*0*	*9*	*100*
Urban districts*	*Number*	449	112	1	38	**600**
	Percentage	*75*	*19*	*0*	*6*	*100*
Rural districts*	*Number*	297	85	—	36	**418**
	Percentage	*71*	*20*	—	*9*	*100*

* Excluding Greater London.

In 1948–49 the proportion of male pedestrian fatalities was highest for residents in the county boroughs (54 per cent.) and lowest for residents in rural districts (29 per cent.); for women resident in Greater London and the county boroughs, 79 per cent. of the road fatalities occurred to pedestrians, compared with 62 per cent. for residents in rural districts. Pedal cyclists of each sex formed a slightly

higher percentage of killed for residents in rural districts than in the other density aggregates. For both men and women the proportion of motor vehicle non-collision accidents was highest for residents in county boroughs and lowest for residents in rural districts.

Table CXLIV(i).—Road Traffic Accidents : Civilian death rates per million living in Regions and different classes of Area by Sex and Age, 1948

	0–		15–		45–		65 and over	
	Males	Females	Males	Females	Males	Females	Males	Females
England and Wales	**119**	**66**	**117**	**20**	**130**	**36**	**300**	**133**
South East	93	49	112	21	133	37	268	164
Greater London	91	40	84	18	113	35	326	195
Remainder of South East	95	59	152	25	159	41	210	131
North	149	73	103	20	118	32	332	144
North I	169	62	94	18	128	37	273	87
North II	124	104	135	24	85	6	323	123
North III	116	66	85	25	122	35	318	160
North IV	165	75	110	17	119	33	364	156
Midland	124	69	129	21	147	47	346	105
Midland I	131	68	138	23	161	48	353	109
Midland II	109	72	113	17	122	45	333	97
East	94	66	136	14	184	34	299	98
South West	73	99	160	12	152	29	256	78
Wales	142	79	126	23	75	31	242	54
Wales I	153	85	117	22	85	45	212	52
Wales II	113	65	151	26	49	—	308	58
County boroughs*	135	66	92	18	117	35	363	141
Other urban districts*	115	69	114	18	116	35	257	112
Rural districts*	124	83	197	30	194	42	265	98

* Excluding Greater London.

Table CXLIV(ii).—Road Traffic Accidents : Civilian death rates per million living in Regions and different classes of Area by Sex and Age, 1949.

	0–		15–		45–		65 and over	
	Males	Females	Males	Females	Males	Females	Males	Females
England and Wales	**116**	**56**	**144**	**21**	**129**	**38**	**328**	**126**
South East	93	50	130	22	122	32	331	139
Greater London	97	47	99	14	98	30	334	160
Remainder of South East	87	53	175	32	154	34	327	117
North	141	66	133	20	125	40	343	127
North I	144	46	96	20	130	18	300	43
North II	109	108	176	34	194	30	355	96
North III	124	62	150	22	115	34	348	125
North IV	157	66	128	16	116	53	353	158
Midland	112	53	161	20	148	44	351	140
Midland I	110	45	159	20	158	41	357	146
Midland II	117	68	166	19	130	50	339	127
East	105	65	178	19	175	29	413	89
South West	104	42	209	21	116	52	206	93
Wales	136	60	144	20	111	28	232	59
Wales I	164	73	119	17	97	31	247	61
Wales II	63	26	212	26	146	21	200	57
County boroughs*	134	58	112	19	127	43	330	155
Other urban districts*	116	58	150	21	107	29	319	94
Rural districts*	103	59	233	29	202	53	335	100

* Excluding Greater London.

Table CXLIV shows the death rates from road traffic accidents by geographical regions for four age groups of males and females. In each of the main divisions the highest rates for men occurred at ages 65 and over ; for females the rates in this age group were exceeded by those at ages under 15 in both the South West and Wales in 1948 and in Wales in 1949. In the South East, North, Midlands and East girls under 15 years of age had higher accident rates than women aged 15–64, but their rates were little more than half those for boys of the same age. In the Northern region the death rates per million for boys under 15 were 149 and 141 in 1948 and 1949 respectively. Greater London, which had some of the lowest rates for other sex-age groups, had the highest death rate for women aged 65 and over in both years. It would be interesting to know if and to what extent defective sight and hearing contribute to the high rates among the elderly.

The following table compares the death rates from road traffic accidents in geographical regions with those for England and Wales for 1947 to 1949, and also the ratio of male to female rates.

	0–			15–			45–			65 and over		
	Male	Female	M/F	Male	Female	M/F	Male	Female	M/F	Male	Female	M/F
1947												
England and Wales	**100**	**100**	**2·05**	**100**	**100**	**5·83**	**100**	**100**	**3·09**	**100**	**100**	**2·47**
Greater London ..	78	81	1·98	70	87	4·67	98	109	2·78	128	135	2·35
Rest of South East	93	83	2·31	110	125	5·13	102	78	4·03	88	93	2·37
North	121	110	2·25	94	83	6·55	93	93	3·07	108	105	2·53
Midland	106	122	1·77	123	100	7·17	105	109	2·98	105	80	3·25
East	61	74	1·70	109	150	4·25	127	139	2·83	64	45	3·57
South West ..	83	121	1·41	139	146	5·57	118	107	3·41	72	87	2·04
Wales	97	88	2·27	94	96	5·74	90	96	2·91	60	99	1·50
1948												
England and Wales	**100**	**100**	**1·80**	**100**	**100**	**5·85**	**100**	**100**	**3·61**	**100**	**100**	**2·26**
Greater London ..	76	61	2·28	72	90	4·67	87	97	3·23	109	147	1·67
Rest of South East	80	89	1·61	130	125	6·08	122	114	3·88	70	98	1·60
North	125	111	2·04	88	100	5·15	91	89	3·69	111	108	2·31
Midland	104	105	1·80	110	105	6·14	113	131	3·13	115	79	3·30
East	79	100	1·42	116	70	9·71	142	94	5·41	100	74	3·05
South West ..	61	150	0·74	137	60	13·33	117	81	5·24	85	59	3·28
Wales	119	120	1·80	108	115	5·48	58	86	2·42	81	41	4·48
1949												
England and Wales	**100**	**100**	**2·07**	**100**	**100**	**6·86**	**100**	**100**	**3·39**	**100**	**100**	**2·60**
Greater London ..	84	84	2·06	69	67	7·07	76	79	3·27	102	127	2·09
Rest of South East	75	95	1·64	122	152	5·47	119	89	4·53	100	93	2·79
North	122	118	2·14	92	95	6·65	97	105	3·13	105	101	2·70
Midland	97	95	2·11	112	95	8·05	115	116	3·36	107	111	2·51
East	91	116	1·62	124	90	9·37	136	76	6·03	126	71	4·64
South West ..	90	75	2·48	145	100	9·95	90	137	2·23	63	74	2·22
Wales	117	107	2·27	100	95	7·20	86	74	3·96	71	47	3·93

173. Air Transport Accidents.—Deaths in air transport accidents from 1931 onwards are shown in Table CXLV. There were in all 202 deaths in 1948–49, of which 62 (31 per cent.) were occupational, compared with 75 in 1946–47 of which 32 (43 per cent.) were occupational. Deaths of non-civilian males, not included in the table, which numbered 95 in 1947, were 121 and 115 in 1948 and 1949 respectively ; no service women died in air transport accidents in these years.

(55588)

Table CXLV.—Air Transport Accidents : Deaths by Sex and Age, excluding non-Civilians after 3rd September, 1939, for Males, and after 1st June, 1941, for Females, 1931–49.

Year	Males						Females						Persons all ages
	0–	15–	25–	35–	45–	55 and over	0–	15–	25–	35–	45–	55 and over	
1931	—	37	25	6	1	1	—	1	—	3	—	—	74
1932	1	19	18	2	—	—	—	—	1	2	—	—	43
1933	2	19	23	3	—	—	—	—	2	—	—	—	49
1934	—	20	33	6	1	2	—	1	2	—	1	1	67
1935	—	27	21	7	—	1	—	2	3	—	—	—	61
1936	—	36	35	16	4	1	—	2	3	2	—	—	99
1937	1	99	46	18	4	3	—	1	2	1	—	—	175
1938	4	98	66	12	4	3	—	3	2	2	—	—	194
1939	—	102	69	18	—	1	2	1	1	2	—	1	197
1940	—	5	9	9	4	—	1	1	1	1	—	—	31
1941	—	1	1	3	1	—	—	—	—	—	—	1	7
1942	—	2	4	—	—	1	—	—	—	—	—	—	7
1943	—	8	18	4	—	—	—	4	1	1	—	—	36
1944	—	8	13	8	2	—	—	3	3	2	—	—	39
1945	—	7	10	2	3	1	—	—	1	—	—	—	24
1946	—	2	8	4	1	—	—	—	1	—	—	—	16
1947	1	11	21	11	3	3	1	2	1	1	3	1	59
1948	2	12	38	20	12	4	1	6	4	5	3	—	107
1949	2	13	26	23	9	3	5	4	—	3	6	1	95

Fatal Accidents in Houses and other Places of Residence.—In the Review for 1940–45, estimates were given of fatal accidents which "according to their description most probably occurred in places of residence." Similar figures were published in the Review for 1946–47. The basis of estimation was necessarily approximate and the description of the estimates indicated that they must be used with caution.

A considerable interest was, however, being taken in the problem of preventing domestic accidents and in 1947 the Secretary of State for Home Affairs appointed a Standing Inter-departmental Committee on Accidents in the Home. To enable the problem to be tackled it was essential that some information should be provided about the numbers of such accidents, indicating the type of accident and the sex and age of their victims. The only reliable source of information related to fatal accidents and it must be borne in mind that the figures do not truly reflect the distribution of non-fatal accidents, particularly as regards age.

In 1948 Coroners agreed to give, in relation to every inquest case relating to an accidental death, information about the place of accident. This information provided a means of checking the basis of estimation used in earlier years and it was found that, for the causes included in Table CXXVI in the Review for 1940–45 and Table CXLIV in the Review for 1946–47, the proportion of accidents which occurred in the home or other places of residence was so great that it was not worth while adjusting the estimates for the small numbers which occurred elsewhere. On the other hand, it was found that, except for falls among males, the residual categories of burns and falls which were included in Table CXXVI in the Review for 1940–45 and Table CXLV in the Review for 1946–47 also took place predominantly in places of residence. These causes have therefore been included in Tables CXLVI and CXLVII.

Table CXLVI gives a summary of the estimates for all ages for each of the years 1940 to 1949.

Table CXLVI.—Deaths from Accidents not known to be Occupational, which by their description occurred most probably in Places of Residence, 1940 to 1949 (excluding non-civilians).

Cause of death (type of accident)		1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Coal gas and carbon monoxide poisoning	M.	166	151	118	84	126	182	154	182	169	191
	F.	159	119	129	124	150	201	208	265	202	233
Other acute poisoning (not by gas)	M.	62	75	60	65	50	74	75	81	110	96
	F.	59	73	62	44	52	83	77	105	96	103
Conflagration	M.	62	63	81	64	63	46	48	45	19	20
	F.	68	63	64	57	65	46	62	51	28	38
Burns by clothing	M.	97	79	79	82	77	71	45	64	46	84
	F.	401	367	369	286	321	314	291	299	205	276
Burns by falling into fire	M.	46	52	44	30	25	35	32	33	23	18
	F.	66	87	49	40	48	39	27	39	36	25
Miscellaneous burns	M.	44	36	25	33	44	45	34	49	31	20
	F.	35	32	18	26	40	55	34	38	24	24
Scalds	M.	233	226	163	144	138	102	87	70	59	60
	F.	171	159	137	128	93	100	75	60	99	74
Other burns (details not stated)	M.	123	104	91	49	61	55	52	47	25	9
	F.	223	168	171	133	114	118	112	109	56	19
Mechanical suffocation in bed, cot, cradle	M.	190	214	209	226	251	231	237	266	211	216
	F.	127	167	151	119	165	160	185	221	159	138
Mechanical suffocation, food or rubber teat	M.	137	129	127	111	127	149	204	306	232	238
	F.	84	91	94	74	114	120	150	194	182	166
Mechanical suffocation by other means	M.	27	28	19	30	43	34	71	39	38	23
	F.	15	23	14	16	28	24	25	28	16	16
Fall from bed	M.	35	30	29	19	29	18	11	36	38	53
	F.	65	60	56	50	38	43	47	50	84	139
Fall downstairs	M.	492	493	371	335	309	309	234	246	250	277
	F.	791	651	567	499	466	402	353	360	416	447
Fall indoors	M.	449	394	388	383	350	337	357	422	394	447
	F.	1,140	1,030	998	1,030	1,004	986	1,052	1,069	1,087	1,326
Fall from ladders and windows	M.	139	117	128	115	109	121	89	113	81	77
	F.	72	67	55	56	62	54	59	59	48	52
Other falls	M.	512	457	359	334	282	327	345	344	229	106
	F.	1,009	904	693	625	634	682	716	715	435	228
Electric currents	M.	52	37	33	34	34	31	34	39	33	28
	F.	6	16	14	17	17	18	14	14	17	18
Other accidents	M.	58	46	52	43	68	83	62	89	59	83
	F.	36	43	41	55	49	37	57	55	41	69
Total	M.	**2,924**	**2,731**	**2,376**	**2,181**	**2,186**	**2,250**	**2,171**	**2,471**	**2,047**	**2,046**
	F.	**4,527**	**4,120**	**3,682**	**3,379**	**3,460**	**3,482**	**3,544**	**3,731**	**3,231**	**3,391**

As already indicated, the estimates for most of the causes concerned probably over-state slightly the actual numbers of fatal accidents in places of residence, but the figures indicate the trend in frequencies of different types of fatal domestic accidents in the years concerned. The main features of these trends are :—

1. An increase in deaths from poisoning of all types.
2. A remarkable decline in deaths from burns and scalds.
3. An increase until 1947 in deaths from mechanical suffocation, particularly by food or rubber teat.
4. A decline in deaths from falls.

In considering the reasons for these trends it must be borne in mind that the early years of the period covered were the early years of the war, and it may be expected, as suggested in the Review for 1940–45, that attempts to maintain blackout restrictions took their toll, particularly as a cause of falls. It should also be borne in mind that the frequency of death from burns and scalds has been greatly reduced by improved methods of treatment ; the frequency of accident from these causes has probably declined to nothing like the same extent.

(55588)

Table CXLVII.—Groups of Accidents not known to be Occupational which by their description occurred most probably in Places of Residence. Mean Annual Death rates per million according to Sex and Age (excluding non-civilians). 1940-43, 1944-47 and 1948-49.

Cause of Death (type of accident)	Period	Males					Females				
		0–	5–	15–	65 and over	**All Ages**	0–	5–	15–	65 and over	**All Ages**
Coal gas and carbon monoxide poisoning.	1940–43	2·73	1·82	6·70	27·33	**7·56**	3·37	1·68	3·19	33·31	**6·17**
	1944–47	4·23	1·67	6·26	42·04	**9·09**	4·44	1·72	4·58	49·54	**9·42**
	1948–49	4·51	0·86	6·24	42·66	**8·79**	3·35	1·24	4·43	51·80	**9·69**
Other acute accidental poisoning (not by gas).	1940–43	8·52	0·69	3·58	6·68	**3·82**	6·03	0·53	2·58	4·76	**2·76**
	1944–47	8·16	0·62	3·68	6·98	**3·95**	6·65	0·82	3·38	6·22	**3·62**
	1948–49	9·28	1·20	4·96	7·15	**5·03**	6·42	0·53	4·40	7·35	**4·43**
Burns all types (including conflagration)	1940–43	161·53	15·95	8·39	80·94	**29·88**	144·63	36·25	14·20	137·21	**38·54**
	1944–47	85·36	12·32	4·67	60·58	**19·31**	83·33	27·57	8·73	118·02	**29·14**
	1948–49	46·95	3·93	2·59	36·53	**10·11**	58·33	12·44	6·55	78·43	**20·13**
Conflagration	1940–43	12·44	3·64	2·00	9·80	**3·94**	7·81	2·92	1·81	7·30	**2·93**
	1944–47	10·42	2·29	1·30	6·45	**2·85**	5·86	1·99	1·28	8·68	**2·56**
	1948–49	2·39	0·34	0·73	2·04	**0·95**	1·95	1·07	0·83	5·14	**1·47**
Burns by clothing (any means)	1940–43	14·31	5·11	1·60	18·27	**4·91**	34·78	22·78	6·72	62·63	**16·53**
	1944–47	9·22	4·05	0·97	14·24	**3·63**	24·40	18·59	4·33	59·80	**14·00**
	1948–49	11·41	2·23	0·77	13·54	**3·17**	17·86	9·06	3·80	46·11	**10·71**
Burns by falling into fire ..	1940–43	3·92	0·26	0·61	17·67	**2·51**	5·50	0·35	1·03	16·05	**2·81**
	1944–47	2·12	0·09	0·24	13·30	**1·76**	1·58	0·09	0·57	10·66	**1·75**
	1948–49	1·33	—	0·29	7·15	**1·00**	1·67	0·18	0·40	7·71	**1·36**
Miscellaneous burns	1940–43	5·28	1·30	0·76	7·43	**1·89**	5·68	0·62	0·37	5·42	**1·28**
	1944–47	5·14	2·02	0·73	8·06	**2·12**	6·97	0·63	0·67	7·50	**1·91**
	1948–49	3·18	0·34	0·58	5·36	**1·25**	1·67	0·18	0·40	5·33	**1·07**

Scalds	1940–43	110·58	3·12	0·97	5·64	**11·17**	72·40	2·39	1·05	10·73	**6·91**
	1944–47	50·91	1·14	0·35	4·16	**5·61**	35·49	0·82	0·43	6·81	**3·75**
	1948–49	26·53	1·03	0·18	2·04	**2·91**	31·26	0·71	0·63	6·98	**3·85**
Other burns (details not stated)	1940–43	14·99	2·51	2·45	22·13	**5·47**	18·46	7·18	3·23	35·08	**8·08**
	1944–47	7·55	2·73	1·08	14·37	**3·35**	9·03	5·44	1·45	24·57	**5·18**
	1948–49	2·12	—	0·04	6·39	**0·83**	3·91	1·24	0·50	7·16	**1·67**
All falls	1940–43	27·94	15·43	23·41	623·35	**81·33**	20·05	6·38	20·87	993·69	**121·04**
	1944–47	24·17	13·46	13·39	466·22	**62·01**	15·21	3·99	13·20	781·43	**101·16**
	1948–49	18·30	10·79	8·75	403·32	**47·64**	10·05	3·38	10·58	714·00	**94·92**
Falls from bed	1940–43	2·22	—	0·16	13·81	**1·65**	1·95	0·09	0·23	22·68	**2·68**
	1944–47	1·21	—	0·29	9·81	**1·33**	1·11	—	0·18	15·79	**2·03**
	1948–49	1·86	—	0·15	20·43	**2·22**	0·84	—	0·23	39·13	**4·97**
Falls downstairs	1940–43	6·13	1·04	13·74	153·27	**24·65**	3·90	1·06	9·88	208·03	**29·13**
	1944–47	4·53	0·79	6·78	100·87	**15·50**	2·53	0·63	4·52	127·00	**18·07**
	1948–49	2·39	0·51	4·34	101·15	**12·87**	1·40	0·18	3·84	136·11	**19·22**
Other falls indoors	1940–43	6·47	0·43	4·54	186·54	**21·88**	4·79	0·80	5·55	398·03	**46·08**
	1944–47	6·95	0·88	2·91	159·03	**19·37**	3·96	0·36	4·50	358·59	**44·95**
	1948–49	6·37	1·20	2·70	164·75	**18·32**	3·35	0·53	3·90	377·85	**48·78**
Falls from ladders and windows	1940–43	4·09	0·69	4·97	36·54	**7·27**	3·55	0·71	1·75	12·95	**2·90**
	1944–47	4·23	0·62	3·41	32·51	**6·10**	3·96	0·36	1·57	10·95	**2·67**
	1948–49	3·18	0·34	1·57	25·80	**3·86**	1·95	—	1·42	9·18	**2·23**
Falls, others and not stated ..	1940–43	9·03(1)	13·26(1)	—(2)	233·18	**25·89**	5·86(1)	3·72(1)	3·46(1)	352·00	**40·24**
	1944–47	7·25(1)	11·17(1)	—(2)	164·00	**19·71**	3·64(1)	2·63(1)	2·43(1)	269·09	**33·43**
	1948–49	4·51(1)	8·73(1)	—(2)	91·19	**10·38**	2·51(1)	2·67(1)	1·19(1)	151·73	**19·73**

(1) Only 50 per cent. of non-occupational deaths registered in these groups have been treated as resulting from accidents in places of residence.
(2) None of the deaths registered in this group have been treated as resulting from accidents in places of residence.

In Table CXLVII death rates per million population from certain types of domestic accident (as estimated on the above basis) are set out by age groups, comparing the two four-year periods 1940–43 and 1944–47 with the two-year period 1948–49.

Coal gas poisoning is a particular risk among old people who may forget to turn gas taps off or to light gas which has been turned on and, through failing sense of smell, may not become aware that gas is escaping. The figures suggest that this risk is increasing.

The risk of dying from *other acute accidental poisoning* is least at school ages. The risk is increasing among adults, but remains greatest among boys aged under 5 years and it is in this age group that preventive measures, whether by education or by some means of discouraging children from devouring pills, appear to be most needed.

Mortality from non-occupational *burns and scalds* has declined remarkably in both sexes, but rather more in males than in females with the result that, in 1948–49, mortality from these causes among males was only half that among females. If, however, burns by clothing, for which the risk is much greater among females and for which mortality has declined more slowly, are excluded, the difference in the experience of the two sexes is not great. The reduction in male mortality from scalds to one quarter of its level in 1940–43 is outstanding.

While it is clear that certain types of *falls* such as falls downstairs occur predominantly in places of residence, estimation of the proportion of certain other types of falls and of those where the circumstances of the fall are not stated is particularly difficult. At the beginning of the period the circumstances were not stated for many of these deaths; this means that mortality from particular types of fall may be substantially understated at the beginning of the period, the extent of understatement declining to a small amount in 1948 and 1949. The apparent increase in 1948–49 in " falls from bed ", " falls downstairs " and " other falls indoors " at ages over 65 may therefore not be real. It is clear that, considering all types of fall, all sex-age groups have benefited by the decline in mortality and that among children the risk is greater for boys, while among old people the risk is greater for women. More detailed comparison between different sex-age groups would be unreliable because of the somewhat crude conventions which have had to be adopted in estimating the proportion of falls which occur in places of residence.

Accidental Mechanical Suffocation is a cause of death mainly among infants. Table CXLVIII shows the infant mortality rates for different age periods under 1 year for the two main causes of suffocation separately and combined.

Table CXLVIII.—Accidental Mechanical Suffocation : Deaths of infants under one year, by Sex and Age, per 1,000 related live births. 1940-49.

		Males					Females				
		Under 4 weeks	4 weeks to 3 months	3–6 months	6–12 months	Total under 1 year	Under 4 weeks	4 weeks to 3 months	3–6 months	6–12 months	Total under 1 year
Accidental mechanical suffocation (Int. List No. 182 pt.)											
1. In bed, cot, cradle, etc.	1940–43	0·10	0·29	0·19	0·07	**0·65**	0·08	0·17	0·14	0·05	**0·44**
	1944–47	0·08	0·23	0·23	0·06	**0·60**	0·07	0·18	0·16	0·06	**0·47**
	1948–49	0·07	0·19	0·20	0·06	**0·52**	0·05	0·16	0·13	0·04	**0·38**
2. By food or rubber teat	1940–43	0·03	0·08	0·10	0·05	**0·26**	0·02	0·07	0·06	0·03	**0·18**
	1944–47	0·04	0·14	0·14	0·05	**0·37**	0·03	0·11	0·10	0·05	**0·29**
	1948–49	0·07	0·15	0·17	0·06	**0·45**	0·06	0·13	0·11	0·06	**0·36**
Total	1940–43	**0·13**	**0·36**	**0·28**	**0·11**	**0·88**	**0·10**	**0·25**	**0·20**	**0·08**	**0·63**
	1944–47	**0·12**	**0·38**	**0·37**	**0·12**	**0·99**	**0·10**	**0·30**	**0·26**	**0·10**	**0·76**
	1948–49	**0·14**	**0·34**	**0·37**	**0·12**	**0·97**	**0·11**	**0·29**	**0·24**	**0·09**	**0·73**

The figures suggest that accidental suffocation in bed has been declining while accidental suffocation by food has been increasing and the combined figures show that in each sex-age group, with certain exceptions between 1940–43 and 1944–47, the effect of one change has practically offset the effect of the other. When it is considered that a large proportion of deaths ascribed to suffocation by food is due to inhalation of vomit, it seems likely that the changes are due to a transfer arising from a change in certification practice.

The rapid and steady increase in infant mortality from this cause from 1939 to 1947 except in the first four weeks of life was referred to in the Review for 1946–47 (Text, p. 44–45) as was also the possibility that the majority of infants alleged to have died in this way were the victims of sudden unrecognised illness. Table CXLVIII shows that the increase referred to did not continue in 1948 and 1949, but whether this was due to a reduction in incidence of the unrecognised illness, education in infant feeding and against the use of soft pillows, or a new caution in assigning death to mechanical suffocation cannot be determined.

The rise in mortality from this cause actually started before 1939 at about the same time as the steady fall in mortality certified as due to prematurity. It seems possible that at least a part of the increase in deaths ascribed to mechanical suffocation may be due to the increasing number of premature infants who survive the first few weeks of life and are probably less able than mature infants to resist either a sudden infection or suffocating bed-clothes. Attention has also been drawn to differences in the sex ratios of different types of accidental mechanical suffocation(1), supporting the view that there is some factor other than accident which causes some of these deaths, at any rate among those which occur in cots and cradles.

183. Accidental Drowning.—Deaths of civilians due to accidental drowning classified to No. 183 of the International List numbered 989 (770 males, 219 females) in 1948, and 999 (809 males and 190 females) in 1949. These figures do not include deaths by drowning classified to water transport accidents (71 in 1948 and 99 in 1949).

The crude civilian death rates per million in each year from 1931 were as follows :—

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Males	55	62	63	47	53	49	51	46	56	68
Females ..	12	11	12	10	14	12	14	12	11	12
	1941	1942	1943	1944	1945	1946	1947	1948	1949	
Males	75	58	59	60	63	43	49	38	39	
Females ..	11	10	11	9	11	11	10	10	8	

Both 1948 and 1949 thus show rates for males well below those for the previous eighteen years. The female rate, which has usually been only about one-quarter to one-sixth of the male rate, also recorded the lowest level for this period in 1949.

Regional distribution of deaths from violent causes other than suicide or road traffic accidents.—Table CXLIX sets out the aggregates of different classes of area in order of death rates from violent causes other than suicide and road traffic accidents in each of the years 1947 to 1949.

There is a clear tendency for both sexes at ages over 65 and for women at ages 45–64 to suffer greater risk of dying as a result of these violent causes in the more densely populated areas, while for males at ages 15–44 and 45–64 the order of risk is reversed. The three groups with high risk in the densely populated areas spend a large part of their time at home, while the two groups with low risk in these areas spend a large part of their time at work.

Table CL sets out the geographical regions in similar order.

(1) Swinscow, D. (1951), Brit. Med. J. ii, 1004.

(55588)

Table CXLIX.—Violent Causes other than Suicide or Road Traffic Accidents : Civilian death rates per million living by Sex and Age in Greater London, and Density aggregates outside Greater London, in descending order of magnitude.

MALES						FEMALES					
1947		1948		1949		1947		1948		1949	
0–14											
Rural Districts	328	County Boroughs	286	Rural Districts	272	County Boroughs	225	County Boroughs	184	Rural Districts	174
County Boroughs	328	Rural Districts	261	Urban Districts	259	Urban Districts	203	Rural Districts	182	Urban Districts	163
Urban Districts	315	Urban Districts	253	County Boroughs	244	Rural Districts	200	Urban Districts	160	County Boroughs	145
Greater London	302	Greater London	239	Greater London	215	Greater London	161	Greater London	151	Greater London	124
15–44											
Urban Districts	250	Rural Districts	209	Rural Districts	227	Greater London	47	Rural Districts	48	Rural Districts	37
Rural Districts	248	Urban Districts	191	Urban Districts	195	Rural Districts	42	Greater London	37	Greater London	35
County Boroughs	207	County Boroughs	158	County Boroughs	182	Urban Districts	38	Urban Districts	35	Urban Districts	32
Greater London	168	Greater London	153	Greater London	122	County Boroughs	29	County Boroughs	24	County Boroughs	25
45–64											
Rural Districts	361	Rural Districts	310	Urban Districts	302	Greater London	108	Greater London	100	Greater London	97
Urban Districts	352	Urban Districts	303	Rural Districts	292	County Boroughs	98	County Boroughs	94	Urban Districts	87
County Boroughs	335	County Boroughs	299	County Boroughs	271	Urban Districts	97	Urban Districts	80	County Boroughs	83
Greater London	243	Greater London	231	Greater London	194	Rural Districts	85	Rural Districts	72	Rural Districts	77
65 and over											
Greater London	1098	Greater London	856	Greater London	879	Greater London	1325	Greater London	1130	Greater London	1031
County Boroughs	947	County Boroughs	785	County Boroughs	839	County Boroughs	1085	County Boroughs	951	County Boroughs	1024
Urban Districts	846	Urban Districts	729	Urban Districts	698	Urban Districts	991	Urban Districts	861	Urban Districts	981
Rural Districts	740	Rural Districts	611	Rural Districts	635	Rural Districts	860	Rural Districts	730	Rural Districts	852

Table CL.—Violent Causes other than Suicide or Road Traffic Accidents : Civilian death rates per million living by Sex and Age in Geographical Regions, in descending order of magnitude. 1947, 1948 and 1949.

MALES			FEMALES		
1947	1948	1949	1947	1948	1949
0–14					
North I .. 383	Wales II .. 388	Wales I .. 322	Wales II .. 292	North II .. 266	North I .. 196
North IV .. 374	Wales I .. 359	East 307	North IV .. 257	North I .. 187	Wales II .. 195
Wales II .. 356	North IV .. 299	Wales II .. 300	Wales I .. 256	East 183	South West .. 189
North III .. 347	North II .. 286	North IV .. 286	North II .. 243	North III .. 182	North IV .. 185
Wales I .. 323	Midland I .. 281	North II .. 273	Remainder of South East .. 211	Midland I .. 181	North III .. 166
East 323	North III .. 263	North III .. 269	North III .. 210	Wales I .. 179	North II .. 159
Midland II .. 304	Midland II .. 254	South West .. 260	North I .. 205	Remainder of South East .. 174	Wales I .. 155
Greater London 302	South West .. 249	Remainder of South East .. 249	South West .. 178	Midland II .. 162	Midland II .. 153
South West .. 298	North I .. 240	Midland II .. 233	Midland II .. 178	Wales II .. 156	East 143
Remainder of South East .. 292	Greater London 239	Greater London 215	Midland I .. 171	North IV .. 154	Midland I .. 140
Midland I .. 286	East 238	Midland I .. 206	East 167	Greater London 151	Remainder of South East .. 125
North II .. 284	Remainder of South East .. 215	North I .. 203	Greater London 161	South West .. 134	Greater London 124
15–44					
North II .. 608	Wales I .. 299	North I .. 337	Wales II .. 52	Wales II .. 65	North III .. 36
Wales I .. 408	Wales II .. 288	Wales I .. 314	Remainder of South East .. 52	East 55	South West .. 35
North I .. 381	North I .. 280	North II .. 262	Greater London 47	Wales I .. 42	Greater London 35
North III .. 232	North II .. 231	Midland II .. 198	South West .. 41	Remainder of South East .. 40	Wales II .. 33
South West .. 226	North III .. 197	Midland I .. 195	Midland I .. 34	Greater London 37	Remainder of South East .. 32
East 211	Midland II .. 179	North III .. 186	Midland II .. 32	Midland I .. 36	North IV .. 31
Wales II .. 202	South West .. 163	South West .. 181	North I .. 32	South West .. 35	North II .. 31
North IV .. 192	East 161	Wales II .. 178	Wales I .. 30	North II .. 31	Midland I .. 31
Midland I .. 186	North IV .. 159	North IV .. 171	North III .. 29	North III .. 27	North I .. 30
Remainder of South East .. 173	Remainder of South East .. 156	East 168	North IV .. 28	North I .. 26	Wales I .. 30
Greater London 168	Greater London 153	Remainder of South East .. 147	North II .. 27	North IV .. 25	Midland II .. 22
Midland II .. 154	Midland I .. 139	Greater London 122	East 26	Midland II .. 20	East 19

Table CL.—*continued*

MALES			FEMALES		
1947	1948	1949	1947	1948	1949
45–64					
North II .. 628	Wales I .. 514	North II .. 438	North III .. 153	North III .. 126	North IV .. 104
North I .. 555	North I .. 486	Wales I .. 417	Greater London 108	North I .. 101	Greater London 97
Wales I .. 555	North II .. 423	North I .. 413	Wales I .. 104	Greater London 100	North III .. 92
North III .. 393	Wales II .. 358	Wales II .. 366	South West .. 102	South West .. 95	South West .. 91
Wales II .. 390	North IV .. 319	North III .. 321	East 98	Midland I .. 85	Midland II .. 83
East 357	North III .. 297	East 318	North IV .. 93	North IV .. 85	Remainder of South East .. 83
South West .. 306	South West .. 285	South West .. 318	North II .. 93	Wales II .. 73	North II .. 79
North IV .. 306	East 283	Midland II .. 310	North I .. 87	Midland II .. 72	North I .. 77
Midland II .. 291	Midland II .. 254	Midland I .. 264	Midland I .. 85	Wales I .. 72	Wales II .. 73
Midland I .. 268	Midland I .. 251	North IV .. 241	Wales II .. 85	Remainder of South East .. 72	East 71
Remainder of South East .. 263	Greater London 231	Greater London 194	Remainder of South East .. 81	East 59	Wales I .. 71
Greater London 243	Remainder of South East .. 206	Remainder of South East .. 182	Midland II .. 70	North II .. 49	Midland I .. 63
65 and over					
Greater London 1098	Midland II .. 883	North III .. 968	Greater London 1325	Greater London 1130	North III .. 1338
North III .. 1061	North III .. 866	Greater London 879	North III .. 1310	North I .. 1078	North II .. 1096
Midland II .. 1023	Greater London 856	Wales I .. 847	South West .. 1142	North III .. 1052	Greater London 1031
North I .. 971	North IV .. 801	North I .. 840	Midland I .. 1084	Wales I .. 1021	Midland I .. 993
Wales I .. 944	North II .. 774	Midland I .. 765	Wales I .. 1020	Midland I .. 905	South West .. 962
North IV .. 885	North I .. 768	East 734	Wales II .. 986	North IV .. 865	Remainder of South East .. 941
South West .. 842	South West .. 744	North IV .. 727	North I .. 977	North II .. 840	North IV .. 905
Midland I .. 831	Wales II .. 718	Midland II .. 702	North II .. 958	East 835	Wales I .. 899
Wales II .. 766	Midland I .. 688	North II .. 661	East 957	South West .. 788	North I .. 889
East 759	Wales I .. 671	Wales II .. 650	North IV .. 928	Remainder of South East .. 779	Midland II .. 873
Remainder of South East .. 704	East 570	South West .. 643	Remainder of South East .. 865	Wales II .. 712	East 822
North II .. 635	Remainder of South East .. 556	Remainder of South East .. 595	Midland II .. 834	Midland II .. 695	Wales II .. 755

195a. Vaccinia and other sequelæ of Vaccination against Smallpox.—This section includes deaths classified to Nos. 195a1, Vaccinia, and 195a2, Other sequelæ of vaccination against smallpox ; deaths classified to some other condition as the underlying cause, but with vaccination either mentioned on the certificate or ascertained by enquiry to have been associated with the death are also mentioned here. (For deaths due to the administration of vaccines as prophylaxis against diseases other than smallpox reference should be made to No. 195b on page 260). Deaths of civilians due to 195a are shown in Table 21 (Part I) and those of non-civilians in Table 21A for 1948 and 1949.

In 1948 there were five deaths classed to vaccinia, namely :—

(1) Male, aged 11 weeks, certified as generalized vaccinia.

(2) Male, aged 5 months, certified as encephalitis following vaccination.

(3) Male, aged 8 months, certified as post-vaccinal encephalitis due to vaccination ; enquiry showed that although the child was circumcised between the date of vaccination and that of death 6 weeks later, the symptoms associated by the practitioner with encephalitis arose within a week of vaccination and before circumcision, and the death was attributed by him to post-vaccinal encephalitis.

(4) Male, aged 9 months, certified as vaccinal encephalitis though it is understood that there was no histological evidence of encephalitis.

(5) Male, aged 18 years (non-civilian) certified as cerebral œdema due to encephalitis following vaccination.

There were no deaths assigned to other sequelæ of vaccination in 1948. Besides the five deaths mentioned above there were two deaths in which vaccination was shown in Part II of the death certificate as being a contributory cause. They were :—

(1) Female, aged 11 weeks, certified as acute gastritis with vaccination as a contributory cause ; this was assigned to " inflammation of the stomach " (118.1).

(2) Female, aged 4 months, certified as gastro-enteritis with infected vaccination mark mentioned in Part II ; this was assigned to " enteritis and diarrhœa " (119a).

In 1949 there was one death assigned to vaccinia, namely :—

Male, aged 13 months, certified as hyperpyrexia due to post-vaccinal encephalitis. In this case death occurred 8 months after vaccination and pathological examination revealed no evidence of encephalitis ; symptoms indicative of encephalitis developed one week after vaccination, and from then until death the symptoms were indicative of cerebral disease.

There were no deaths assigned to other sequelæ of vaccination in 1949, but there were two deaths in which vaccination was mentioned on the death certificate as being a contributory cause :—

(1) Male, aged 6 years, certified as pneumonia due to vaccinia, with infantile eczema shown in Part II. Subsequent investigation showed that this child had never in fact been vaccinated, but had contracted vaccinia accidentally from a neighbour's child who had been vaccinated. The death was accordingly assigned to " other diseases attributable to viruses ", sub-group including vaccinia without vaccination (38f).

(2) Female, aged 71 years. The cause of death recorded by the coroner after a post-mortem was " Toxæmia resulting from a series of septic foci aggravated by vaccination. Myocardial degeneration and anæmia.

The sepsis was set up by puncturing her finger with a pen-nib and later cutting her finger on the left hand whilst assisting in painting the house." Assignment was made to " Other myocardial degeneration " (93c.3). The decedent, who was a passenger in transit, had not been vaccinated in this country.

195b. Other accidents due to medical or surgical intervention.—This group includes deaths from anæsthetic accidents in normal childbirth, in operations for sterilization or for æsthetic purposes, or in operations whose purpose was unstated and could not be ascertained. It does not include deaths from anæsthesia known to have been administered in the course of medical and surgical treatment of pre-existent disease or injury, which are classed to the latter. In 1948 the death of one female was assigned to this group and in 1949 the deaths of two males and four females.

Other deaths included under 195b are those due to the sequelæ of preventive inoculation (other than vaccination against smallpox) or of operations for sterilization, ritual circumcision, æsthetic operations, etc., not for curative purposes. It does not include deaths from surgical or medical treatment given for the alleviation of pre-existent disease or injury, which are classed to those causes.

In 1948 there were three deaths classed to 195bb, namely :—

(1) Female, aged under 1 day, certified as asphyxia due to the action of pyelosil accidentally injected into the blood stream through the umbilical cord shortly after birth. Injected for X-Ray purposes—matter of general research.

(2) Male, aged 1 year, certified as renal thrombosis, femoral thrombosis, simple fracture of the femur during nursing. Bed for examination of metabolism.

(3) Male, aged 2 years, statico lymphaticus whilst under anæsthetic (open ether) for removal of a broken hypodermic syringe needle. Immunised against diphtheria.

In 1949 there were five deaths classed in 195bb, namely :—

(1) Male, aged 8 months, certified as encephalopathy due to an idiosyncrasy to pertussis vaccine.

(2) Female, aged 13 months, certified as acute œdema of the lungs due to toxic purpura due to the injection of diphtheria prophylactic. Part V of the coroner's certificate stated that this was the second injection of a course of injections, the first of which had no detrimental effects.

(3) Male, aged 3 years, certified as necrosis of liver, homologous serum jaundice after measles immunisation.

(4) Male, aged 3 years ; ditto.

(5) Female, aged 3 years ; ditto.

199, 200. Ill-defined Causes of Death.—These headings in the International List do not include ill-defined causes of death in infancy, which are assigned to No. 158, Congenital debility, nor of the aged which are listed in No. 162a, c, Old age and senility without mention of senile dementia. Deaths classed to congenital debility, which numbered 1,227 in 1941, 649 in 1945 and 624 in 1947, decreased to 322 and 191 in 1948 and 1949 respectively. Deaths attributed to old age and senility without senile dementia averaged 16,346 per annum in the five years 1940–44, the numbers in the years 1946–49 being 15,354, 14,822, 11,762 and 12,254. According to present practice senility is accepted without

query as a cause of death only in people aged 65 and over ; for those under 65 an enquiry is made to ascertain whether a more definite cause of death was present.

All deaths classified to Nos. 199 and 200 have been the subject of medical enquiries, except those where the cause of the ill-defined condition was described as " not known " or " of uncertain origin ". The average annual deaths assigned to Nos. 199 and 200 during the five years 1940–1944 was 844, and in the four years 1946–1949 the numbers were 532, 461, 344 and 265.

Enquiries sent to medical practitioners and coroners requesting further information about indefinitely certified deaths numbered 9,138 and 10,241 in 1948 and 1949 respectively, 8,261 and 9,432 replies being received. 91 per cent. of the enquiries sent out during 1940–45 yielded replies and for the following four years the proportion of replies was 94, 93, 90 and 92 per cent. Table CLI gives details of replies received.

Enquiry as to the primary site affected in 3,562 cases of cancer in 1948–49 yielded the desired information in 3,141. Of 600 undefined cerebral tumours 419 proved to be malignant (including 327 gliomas) and 118 benign ; of 1,202 ill-defined tumours of other sites 911 were malignant and 166 benign. 46 out of 67 deaths from " tuberculosis " were ascertained to be due to the respiratory form, as were also 86 out of 93 cases of " fibroid phthisis ". " Rheumatism " occasioned 912 enquiries, resulting in 208 assignments to rheumatic fever, 674 to chronic rheumatic heart disease, 6 to rheumatoid arthritis and 4 to other chronic rheumatism.

Of 218 deaths originally described as " encephalitis ", 3 each were finally assigned to tuberculosis, influenza and measles, 11 to poliomyelitis, 6 to polioencephalitis, 98 to encephalitis lethargica and 19 to other forms of encephalitis. Meningitis (unqualified) accounted for 229 enquiries, which gave the information that 90 were non-meningococcal forms. Syphilis accounted for 58 and arterio-sclerosis for 41 out of 176 deaths at first classed as aortitis, arteritis and endarteritis. Enquiries about 1,455 deaths attributed to congestive heart failure brought 1,424 replies covering a wide range of conditions and of 90 deaths at first attributed to endocarditis 13 were subsequently allocated to rheumatic fever and 20 to acute endocarditis.

Mesenteric and femoral thrombosis accounted for 312 and 220 enquiries respectively, with subsequent assignment to arterio-sclerosis (91 and 18), other diseases of the arteries (54 and 15) and diseases of the veins (49 and 105). As a result of 260 queries about lung abscess, 34 were assigned to bronchitis, 25 to broncho-, 13 to lobar, and 31 to unspecified forms of pneumonia. Of 134 cases of hæmatemesis and 109 of pyloric stenosis, 72 and 69 were allocated to ulcers of the stomach or duodenum. Peptic ulcer gave rise to 538 enquiries resulting in 281 assignments to ulcer of the stomach and 156 to that of the duodenum. In 147 cases of peritonitis, enquiry enabled the allocation of 13 to cancer, 14 to ulcer of the stomach or duodenum, 21 to appendicitis and 11 to intestinal obstructions. " Syncope, heart failure " necessitated 553 enquiries, resulting in assignments to cancer 10, heart disease 290, arterio-sclerosis 36, bronchitis 45 and congenital malformation of the heart 11.

Medical enquiries into the cause of deaths connected with childbirth numbered 702 and 599 in 1948 and 1949 respectively.

In addition enquiries were addressed to those practitioners who had initialled statement B on the back of the certificate to indicate that they might be able to give further information when the results of a post mortem or laboratory investigation should become available to them. These numbered 6,428 and 7,305 in 1948 and 1949 ; 5,166 and 5,929 replies were received amending the original statement in 2,423 and 2,590 cases.

Table CLI(i).—Replies to Enquiries respecting Indefinitely Certified Causes of Death, 1948.

Subject of enquiry	Replies received	Replies amplifying previous information	Deaths allocated to certain headings as the result of enquiry
Pyæmia, septicæmia, etc.	73	54	Lymphatic tuberculosis, 1. Congenital syphilis, 1. Varices, 4. Bronchitis, 3. Diseases of the skin, 9.
Tuberculosis	28	26	Tuberculosis of the respiratory system, 17. Tuberculosis of the meninges and central nervous system, 1. Tuberculosis of the other bones and joints, 3. Tuberculosis of the skin and subcutaneous tissue, 1. Tuberculosis of the lymphatic system, 1. Tuberculosis of the genito-urinary system, 1.
Fibroid phthisis	47	46	Tuberculosis of the respiratory system, 43. Silicosis and other occupational pneumoconiosis, 2.
Cancer (part or organ not stated).	1,532	1,347	Part or organ stated in 1,317 cases.
Cerebral tumour (P.M. cases).	315	299	Tuberculosis of the respiratory system, 1. Syphilis, 1. Cancer, 223 (including 168 cases of Glioma). Non-malignant cerebral tumour, 57.
Tumour of other sites ..	612	577	Tuberculosis of the respiratory system, 1. Tuberculosis of the meninges and central nervous system, 3. Syphilis, 1. Cancer, 443. Non-malignant tumour, 95.
Rheumatism	549	546	Tuberculosis of respiratory system, 1. Syphilis, 1. Rheumatic fever, 124. Rheumatoid arthritis, 6. Other chronic rheumatism, 1. Rheumatic heart disease, 409.
Arthritis	99	99	Rheumatoid arthritis, 46. Chronic rheumatism, 44.
Anæmia	165	137	Syphilis, 1. Cancer, 9. Pernicious anæmia, 32. Other hyperchromic anæmias, 9. Hypochromic anæmias, 23. Other anæmias, 14. Diseases of the myocardium, 9. Ulcer of stomach and duodenum, 4. Nephritis, 5.
Encephalitis	103	79	Cerebro-spinal fever, 1. Tuberculosis of respiratory system, 1. Influenza, 2. Measles, 2. Acute poliomyelitis, 2. Acute polioencephalitis, 2. Encephalitis lethargica, 50. Cancer, 1. Other forms of encephalitis, 8.
Cerebro-spinal meningitis	35	35	Cerebro-spinal fever, 27. Meningitis (non-meningococcal), 6. Bronchitis, 1.
Meningitis (unqualified)..	126	96	Cerebro-spinal fever, 18. Tuberculosis of the respiratory system, 3. Tuberculosis of the meninges and central nervous system, 1. Syphilis, 3. Influenza, 4. Measles, 1. Acute polioencephalitis, 1. Encephalitis lethargica, 6. Cancer, 1. Encephalitis, 1. Meningitis (non-meningococcal), 42. Diseases of the ear, 3.
Paraplegia	27	25	Syphilis, 1. Cancer, 2. Diseases of the medulla and spinal cord, 5. Other diseases of the spinal cord, 3.
Spastic paraplegia and paralysis.	37	24	Syphilis, 2. Diseases of the medulla and spinal cord, 6. Disseminated sclerosis, 6.
Aortitis, arteritis and endarteritis.	88	82	Syphilis, 25. Arterio-sclerosis, 24. Other diseases of the arteries, 10.
Congestive heart failure..	440	433	Syphilis, 5. Rheumatic heart disease, 51. Other chronic cardio-vascular degeneration, 36. Myocardial disease, 135. Arterio-sclerosis, 41. High blood pressure (idiopathic), 35.
Valvular heart disease (ages under 45).	92	89	Rheumatic fever, 4. Rheumatic heart disease, 67. Other chronic valvular heart diseases, 15.
Endocarditis	46	42	Rheumatic fever, 7. Acute endocarditis, 9. Rheumatic heart disease, 14. Other chronic valvular heart disease, 8.
Mesenteric thrombosis ..	157	127	Syphilis, 2. Cancer, 2. Arterio-sclerosis, 47. Other diseases of the arteries, 19. Diseases of the veins, 25.
Femoral thrombosis ..	88	83	Cancer, 6. Arterio-sclerosis, 6. Other diseases of the arteries, 4. Diseases of the veins, 41. Ulcer of stomach, 4.
Rupture of aorta ..	40	36	Syphilis, 9. Arterio-sclerosis, 19.
Lung abscess	135	106	Tuberculosis of the respiratory system, 4. Influenza, 1. Cancer, 2. Bronchitis, 24. Broncho pneumonia, 12. Lobar pneumonia, 5. Unspecified pneumonia, 16. Diseases of the teeth and gums, 4.
Hæmatemesis	65	46	Cancer, 5. Ulcer of stomach and duodenum, 29.
Peptic ulcer	271	224	Cancer, 3. Ulcer of stomach, 130. Ulcer of duodenum, 83.
Pyloric stenosis obstruction, etc.	57	51	Tuberculosis of the intestines and peritoneum, 1. Cancer, 5. Ulcer of stomach and duodenum, 37. Other diseases of the stomach, 6.
Jaundice	48	44	Syphilis, 2. Weils disease, 2. Cancer, 8. Cirrhosis of the liver (non-alcoholic), 4. Biliary calculi, 9.
Peritonitis	74	54	Tuberculosis of the intestine and peritoneum, 1. Cancer, 6. Ulcer of stomach and duodenum, 2. Appendicitis, 13. Intestinal obstruction, 6. Other diseases of intestines, 5. Diseases of the female genital organs, 3.
Uræmia	261	251	Tuberculosis of respiratory system, 1. Syphilis, 2. Cancer, 9. Nephritis, 163. Diseases of the prostate, 34.
Retention of urine ..	93	89	Diseases of the prostate, 74. Other diseases of the bladder, 4.
Abscess	171	131	Tuberculosis, 4. Cancer, 7. Diseases of pharynx and tonsils, 14. Ulcer of stomach, 5. Appendicitis, 10. Other diseases of kidneys and ureters, 8.
Cellulitis	73	55	Arterio-sclerosis, 3. Carbuncle, boils, 4. Other diseases of the skin, 4. Diseases of the veins, 8.

Table CLI(i).—(*contd.*)

Subject of enquiry	Replies received	Replies amplifying previous information	Deaths allocated to certain headings as the result of enquiry
Hydrocephalus	44	37	Tuberculosis of meninges and central nervous system, 1. Congenital syphilis, 1. Congenital hydrocephalus, 28. Spina bifida and meningocele, 1.
Violence	367	363	Precise form of suicide, 118. Drowning, 5. Injury by fall, crushing, etc., 47. Injury in mines and quarries, 6. Injury by machinery, 7. Road transport accidents, 69. Accidental absorption of poison gas, 16. Accidental mechanical suffocation, 17. Accidents due to electric currents, 7.
Syncope, heart failure ..	275	257	Syphilis, 4. Influenza, 1. Cancer, 8. Diseases of the heart, 145. Arterio-sclerosis, 19. Bronchitis, 20. Nephritis, 9. Congenital malformation of heart, 5.
Operation	687	671	Tuberculosis of respiratory sytem, 5. Cancer, 64. Tumours of female genital organs, 58. Ulcer of stomach and duodenum, 122. Appendicitis, 11. Hernia, intestinal obstruction, 21. Biliary calculi, 84. Diseases of the prostate, 43. Diseases of the female genital organs, 50. Congenital malformations, 11.
Other indefinite forms of certification	1,818	1,600	Nil.
Total	**9,138**	**8,261**	

In addition 702 enquiries were made in connection with parturition.

Table CLI(ii).—Replies to Enquiries respecting Indefinitely Certified Causes of Death, 1949.

Subject of enquiry	Replies received	Replies amplifying previous information	Deaths allocated to certain headings as the result of enquiry
Pyæmia, septicæmia, etc.	56	48	Cerebro-spinal fever, 2. Syphilis, 1. Cancer, 1. Diseases of the tonsils, 3. Septic abortion, 1. Diseases of the skin and cellular tissue, 8.
Tuberculosis	39	38	Tuberculosis of the respiratory system, 29. Tuberculosis of the vertebral column, 1. Tuberculosis of other bones and joints, 2.
Fibroid phthisis	46	45	Tuberculosis of the respiratory system, 43.
Cancer (part or organ not stated).	2,030	1,857	Part or organ stated in 1,824 cases.
Cerebral tumour (P.M. cases).	285	272	Cancer, 196 (including 159 cases of Glioma). Benign tumour, 61.
Tumour of other sites ..	590	570	Cancer, 468. Non-malignant tumours, 71.
Rheumatism	363	361	Rheumatic fever, 84. Other chronic rheumatism, 3. Rheumatic heart disease, 265.
Arthritis	143	143	Tuberculosis of other bones and joints, 1.Rheumatoid arthritis, 62. Chronic rheumatism, 78.
Anæmia	211	190	Cancer, 16. Pernicious anæmia, 37. Other hyperchromic anæmias, 12. Hypochromic anæmias, 32. Other anæmias, 30. Ulcer of stomach and duodenum, 7. Nephritis, 6. Diseases of the medulla and spinal cord, 7.
Encephalitis	115	95	Tuberculosis of central nervous system, 2. Influenza, 1. Measles, 1. Poliomyelitis, 9. Polioencephalitis, 4. Encephalitis lethargica, 48. Other forms of encephalitis, 11. Meningitis (non-meningococcal), 8.
Cerebro-spinal meningitis	25	19	Cerebro-spinal fever, 17. Polioencephalitis, 1.
Meningitis (unqualified)..	103	90	Cerebro-spinal fever, 17. Tuberculosis of the meninges and central nervous system, 3. Influenza, 5. Measles, 1. Encephalitis lethargica, 1. Cancer, 3. Encephalitis, 5. Meningitis (non-meningococcal), 48. Diseases of the ear, 4.
Paraplegia	41	39	Tuberculosis of vertebral column, 3. Cancer, 3. Other diseases of spinal cord, 10. Intra-cranial lesions of vascular origin, 10.
Spastic paraplegia and paralysis.	32	24	Cerebro-spinal fever, 1. Diseases of the medulla and spinal cord, 7. Arterio-sclerosis, 3.
Aortitis, arteritis and endarteritis.	88	79	Syphilis, 33. Cancer, 1. Arterio-sclerosis, 17.

Table CLI(ii).—(*contd.*)

Subject of enquiry	Replies received	Replies amplifying previous information	Deaths allocated to certain headings as the result of enquiry
Congestive heart failure..	1,015	991	Tuberculosis of the respiratory system, 6. Syphilis, 3. Cancer, 3. Chronic affections of the valves and endocardium, 92. Cardio-vascular degeneration, 92. Other diseases of the myocardium, 298. Diseases of the coronary arteries, 64. Arterio-sclerosis, 99. High blood pressure (idiopathic), 92. Bronchitis, 109. Chronic nephritis, 26.
Valvular heart disease (ages under 45).	51	51	Syphilis, 1. Rheumatic fever, 1. Chronic affections of the valves and endocardium, 45.
Endocarditis	44	39	Rheumatic fever, 6. Acute endocarditis, 11. Chronic affections of the valves and endocardium, 16.
Mesenteric thrombosis ..	155	134	Diseases of the coronary arteries, 4. Arterio-sclerosis, 44. Other diseases of the arteries, 35. Diseases of the veins, 24.
Femoral thrombosis ..	132	120	Cancer, 2. Arterio-sclerosis, 12. Other diseases of the arteries, 11. Diseases of the veins, 64.
Rupture of aorta ..	33	28	Syphilis, 7. Arterio-sclerosis, 16. Other diseases of the arteries, 3.
Lung abscess	125	112	Tuberculosis of the respiratory system, 4. Influenza, 2. Poliomyelitis, 1. Cancer, 6. Bronchitis, 10. Bronchopneumonia, 13. Lobar pneumonia, 8. Unspecified pneumonia, 15. Pleurisy, 5.
Hæmatemesis	69	64	Cancer, 2. Ulcer of stomach or duodenum, 43.
Peptic ulcer	267	238	Cancer, 6. Ulcer of stomach, 151. Ulcer of duodenum, 73.
Pyloric stenosis, obstruction, etc.	52	48	Cancer, 9. Ulcer of stomach or duodenum, 32.
Jaundice	68	65	Influenza, 1. Weil's disease, 2. Cancer, 12. Biliary calculi, 17. Other diseases of the gall bladder and bile ducts, 13.
Peritonitis	73	63	Tuberculosis of the intestines and peritoneum, 1. Cancer, 7. Ulcer of stomach or duodenum, 12. Appendicitis, 8. Hernia, 2. Intestinal obstruction, 5. Other diseases of the intestines, 4. Diseases of the gall bladder and bile ducts, 4. Diseases of the pancreas, 3. Diseases of the female genital organs, 4.
Uræmia	165	158	Cancer, 12. Nephritis, 98. Diseases of the prostate, 21.
Retention of urine ..	95	91	Cancer, 1. Diseases of the prostate, 80.
Abscess	102	70	Tuberculosis, 4. Cancer, 3. Diseases of pharynx and tonsils, 5. Appendicitis, 2. Other diseases of the kidneys and ureters, 8.
Cellulitis	77	55	Diseases of the veins, 10. Carbuncle, boils, 3. Other diseases of the skin, 8.
Hydrocephalus	34	34	Poliomyelitis, 1. Cancer, 1. Congenital hydrocephalus, 27.
Violence	294	286	Precise form of suicide, 103. Motor vehicle accidents, 51. Injury in mines and quarries, 4. Accidental absorption of poisonous gas, 14. Injury by fall, crushing, etc., 40.
Syncope, heart failure ..	278	264	Tuberculosis of the respiratory system, 1. Influenza, 1. Cancer, 2. Diseases of the heart, 145. Arterio-sclerosis, 17. High blood pressure (idiopathic), 28. Bronchitis, 25. Congenital malformation of heart, 6.
Operation	784	770	Tuberculosis, 13. Syphilis, 2. Cancer, 83. Tumours of female genital organs, 54. Diseases of thyroid and parathyroid glands, 20. Ulcer of stomach and duodenum, 165. Appendicitis, 15. Hernia, intestinal obstruction, 27. Biliary calculi, 78. Diseases of the prostate, 29. Diseases of the female genital organs, 48. Congenital malformation, 11.
Other indefinite forms of certification	2,161	1,881	Nil.
Total	**10,241**	**9,432**	

In addition 599 enquiries were made in connection with parturition.

Anæsthetics.—Deaths during or connected with anæsthesia are primarily classified to the disease or injury requiring the administration of an anæsthetic. All such deaths are separately distinguished, together with the anæsthetic agents employed, so that it is possible to obtain additional information about them by means of secondary tabulation. A few deaths occur each year among cases requiring anæsthesia for reasons other than the treatment or diagnosis of the disease. Such deaths are classified to 195 ba " Anæsthetic accidents ". They appear amongst " other causes " in Table CLV and are also included in the other tables in this section.

Table CLII.—Deaths, including those of non-civilians, under or associated with Anæsthesia, 1901–45 and 1921 to 1949.

Year	Males									Females								
	All Ages	0–	5–	15–	25–	35–	45–	55–	65 and over	All Ages	0–	5–	15–	25–	35–	45–	55–	65 and over
Yearly average:—																		
1901–05* ..	**95**	14	20	9	13	16	11	7	4	**53**	6	9	7	11	8	8	3	2
1906–10* ..	**125**	26	20	12	16	18	16	9	8	**77**	7	14	9	18	11	10	4	3
1911–15 ..	**167**	30	23	14	20	28	24	16	10	**116**	14	17	15	16	22	18	10	5
1916–20 ..	**188**	36	25	25	27	22	20	19	13	**119**	11	16	14	21	22	17	7	9
1921–25 ..	**229**	40	28	20	18	27	36	37	24	**169**	20	17	17	30	29	25	17	12
1926–30 ..	**361**	56	47	30	26	37	50	62	53	**288**	29	29	29	44	51	49	34	23
1931–35 ..	**432**	63	48	37	33	43	56	80	71	**353**	34	40	36	60	55	50	43	35
1936–40 ..	**457**	65	51	37	40	42	59	77	85	**401**	34	41	34	64	59	55	60	54
1941–45 ..	**436**	59	45	30	39	43	59	71	92	**360**	31	27	26	48	53	53	56	67
1921	**204**	30	29	16	16	19	34	30	30	**133**	16	23	16	24	21	19	11	3
1922	**185**	29	21	16	9	27	30	35	18	**151**	16	15	12	29	31	26	12	10
1923	**262**	45	37	29	17	38	35	34	27	**184**	22	23	14	23	32	32	23	15
1924	**245**	51	30	21	25	21	42	39	16	**184**	26	11	30	29	31	21	18	18
1925	**249**	43	25	17	23	28	39	45	29	**193**	22	14	15	43	32	29	23	15
1926	**306**	57	43	23	29	34	39	43	38	**250**	32	22	29	35	44	51	23	14
1927	**328**	43	51	25	20	30	42	70	47	**268**	24	28	29	46	47	40	35	19
1928	**384**	63	41	30	23	43	55	67	62	**272**	29	21	27	44	45	44	33	29
1929	**414**	66	61	31	25	43	63	64	61	**316**	35	35	27	52	52	50	43	22
1930	**375**	51	41	39	34	34	52	68	56	**332**	27	39	33	45	66	58	35	29
1931	**413**	60	51	44	36	41	51	73	57	**310**	27	40	23	60	55	43	38	24
1932	**416**	66	49	37	29	45	58	68	64	**333**	24	40	33	60	58	42	36	40
1933	**425**	67	47	44	22	42	56	78	69	**343**	35	39	47	50	44	48	47	33
1934	**440**	66	45	29	37	43	48	91	81	**374**	43	43	38	67	45	53	46	39
1935	**467**	57	47	31	43	45	68	91	85	**403**	42	37	37	63	75	64	47	38
1936	**453**	69	53	39	44	39	57	73	79	**386**	41	33	31	69	59	54	55	44
1937	**458**	68	48	40	35	40	76	75	76	**436**	40	41	44	71	65	56	60	59
1938	**491**	74	59	45	45	36	63	76	93	**425**	34	43	34	63	61	60	69	61
1939	**452**	56	51	28	37	44	55	87	94	**393**	28	47	26	62	61	63	58	48
1940	**430**	60	44	35	37	49	46	75	84	**365**	28	39	33	54	51	43	57	60
1941	**465**	58	54	30	51	52	55	82	83	**370**	35	36	24	45	63	59	48	60
1942	**418**	63	40	33	40	44	52	59	87	**348**	23	25	37	38	47	40	56	82
1943	**455**	63	48	29	39	41	63	79	93	**385**	31	26	24	50	66	68	70	50
1944	**423**	56	47	26	29	44	60	61	100	**352**	41	26	21	53	42	49	56	64
1945	**419**	53	34	33	34	32	64	72	97	**345**	27	20	22	52	48	47	51	78
1946	**431**	60	35	21	26	36	66	82	105	**320**	23	28	19	37	35	44	52	82
1947	**380**	56	27	28	22	27	49	66	105	**348**	24	25	21	34	50	49	65	80
1948	**406**	60	25	15	19	25	39	61	162	**315**	31	17	12	34	30	40	54	97
1949	**389**	52	25	10	16	37	68	81	100	**315**	28	14	23	36	40	39	61	74

* Excluding deaths from cancer and strangulated hernia.

Table CLII shows the numbers of anæsthetic deaths by age and sex quinquennially from 1901–05, and by single years from 1921. In Tables CLIII(i) and (ii) those during each of the years 1948 and 1949 are distinguished, again by age and sex, according to the anæsthetic agents and associated drugs employed. The various combinations are listed as given by coroners on their certificates. Sometimes the premedication was recorded as well as the anæsthetic agent itself. In other instances the relaxant employed was also mentioned, and in 9 cases during 1948 and 1949 it appeared alone. Local anæsthetic agents were cited sometimes with and sometimes without mention of any agents for supplementary anæsthesia that may have been used. The combinations in Table CLIII are therefore arbitrary, and merely reproduce the statements on the certificates. No attempt has been made to group or classify the material. Some coroners evidently mention all the drugs employed in the anæsthesia, while others are content to record only one.

Table CLIII(i).—Deaths, including those of non-civilians, under or connected with the administration of various Anæsthetics, according to Sex and Age, 1948.

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)												
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
A.C.E.	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Amethocaine	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
	F.	3	—	—	—	—	—	—	—	—	—	—	—	1	1	1
Amethocaine, thiopentone and tubocurare	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Anethaine	M.	3	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Anethaine and cocaine	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Avertin	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Butyl ethyl barbitone	F.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Chloroform	M.	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—
	F.	4	—	—	—	—	—	—	1	2	—	—	1	—	—	—
Chloroform and ether	M.	3	—	1	—	1	—	—	—	—	—	1	—	—	—	—
	F.	4	—	—	1	1	—	1	—	—	—	—	—	—	—	1
Chloroform, ether and ethyl chloride	M.	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Chloroform, ether, ethyl chloride and alcohol	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Chloroform, ether and nitrous oxide	F.	2	1	—	—	—	—	—	—	—	—	1	—	—	—	—
Chloroform and ethyl chloride	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Chloroform and nitrous oxide	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Cocaine	M.	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—
	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Curare	M.	2	—	—	—	1	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Curare and cyclopropane	M.	7	—	—	—	1	—	—	1	—	—	—	—	—	3	2
Curare, cyclopropane and pentothal	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
	F.	3	—	—	—	—	—	—	—	—	—	1	—	1	1	—
Curare and pentothal	M.	14	—	1	—	—	—	—	1	—	—	—	1	—	4	7
	F.	8	—	—	—	—	—	—	—	—	—	1	—	1	4	2
Cyclonal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Cyclopropane	M.	7	—	—	—	—	—	—	—	—	—	1	—	3	1	2
	F.	4	—	—	—	1	—	—	—	1	—	—	—	1	—	1
Cyclopropane and amethocaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cyclopropane and avertin	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Cyclopropane and nupercaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cyclopropane and pentothal	M.	11	—	—	—	—	1	—	1	1	—	1	—	—	2	5
	F.	10	—	1	—	—	—	—	—	1	1	—	—	2	3	2
Cyclopropane, pentothal and percaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cyclopropane, pentothal and scopolamine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cyclopropane, pentothal and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cyclopropane and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Decicaine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Decicaine and procaine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Duracaine	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Ephedrine	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ether	M.	28	4	11	3	2	1	—	—	—	—	—	1	—	3	3
	F.	27	1	3	1	1	2	2	2	2	1	3	1	—	2	6
Ether, avertin and nitrous oxide	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Ether and cyclopropane	M.	3	—	—	—	—	—	—	—	—	—	—	—	1	—	2
	F.	2	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Ether, cyclopropane, curare pentothal	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Ether, cyclopropane and nitrous oxide	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ether, cyclopropane and pentothal	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, cyclopropane and tubarine	M.	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether and ethyl chloride	M.	26	3	16	—	2	1	—	—	—	—	—	—	1	1	2
	F.	17	3	9	2	2	—	—	—	—	—	—	—	—	—	1
Ether, ethyl chloride and nitrous oxide	M.	5	—	—	—	1	—	—	—	—	—	—	—	1	2	1
	F.	5	1	1	—	1	—	—	—	—	—	—	—	—	1	1
Ether, ethyl chloride, omnopon and scopolamine	F.	2	—	—	—	1	—	—	—	—	—	—	—	—	1	—
Ether and nitrous oxide	M.	37	—	4	1	2	1	1	—	—	—	2	2	—	7	17
	F.	40	1	4	—	1	2	—	3	3	1	4	1	4	5	11
Ether, nitrous oxide and curare	M.	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1

Table CLIII(i).—(*contd.*)

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Ether, nitrous oxide, curare and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Ether, nitrous oxide, cyclopropane and curare	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, nitrous oxide, nembutal and atropine	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Ether, nitrous oxide and pentothal	M.	19	—	—	—	1	1	1	1	3	—	—	2	2	2	6
	F.	9	—	—	—	—	—	1	—	—	—	—	2	—	3	3
Ether, nitrous oxide, trilene and curare	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether and nupercaine	M.	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ether and pentothal	F.	4	—	—	—	—	—	—	2	—	—	1	—	—	—	1
Ether, pentothal and curare	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, pentothal and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Ether, trilene and atropine	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Ether, trilene and cyclopropane	M.	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ether, trilene, nitrous oxide and pentothal	M.	2	—	—	—	—	—	1	—	—	—	1	—	—	—	—
Ether, trilene and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether and tulere	M.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Ethyl chloride	M.	12	2	4	2	1	—	—	—	—	—	—	—	—	—	3
	F.	3	—	—	—	—	1	—	—	2	—	—	—	—	—	—
Ethyl chloride and nitrous oxide	M.	5	2	—	—	—	—	—	—	—	—	—	—	—	—	3
	F.	8	—	1	—	—	—	—	1	2	—	—	—	1	2	1
Ethyl chloride, nitrous oxide and curare	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Ethyl chloride, nitrous oxide, cyclopropane and pentothal	F.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Ethyl chloride, nitrous oxide, omnopon and scopolamine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ethyl chloride, nitrous oxide and pentothal	M.	7	—	—	—	—	—	—	—	1	—	—	1	1	—	4
	F.	3	—	—	—	—	—	—	—	—	1	—	—	—	1	1
Ethyl chloride, nitrous oxide, pentothal and curare	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Evipan	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Hexobarbitone and curare	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Hypercaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nembutal and tubarine	M.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Nitrous oxide	M.	21	—	—	—	—	2	—	—	1	1	1	—	1	5	10
	F.	18	—	1	—	1	—	1	2	1	—	—	2	3	3	4
Nitrous oxide and avertin	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Nitrous oxide and curare	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide and cyclopropane	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
	F.	2	—	—	—	—	—	—	1	—	—	1	—	—	—	—
Nitrous oxide, cyclopropane, pentothal and nupercaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide, cyclopropane and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Nitrous oxide and novocaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nitrous oxide and nupercaine	M.	2	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Nitrous oxide and pentothal	M.	17	—	—	1	—	—	—	—	—	—	2	—	1	6	7
	F.	12	—	—	—	—	—	—	1	—	1	1	1	—	1	7
Nitrous oxide, pentothal and curare	M.	2	—	—	—	—	—	—	1	—	—	—	—	—	1	—
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Nitrous oxide, pentothal, curare and novocaine	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Nitrous oxide, pentothal and cyclopropane	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Nitrous oxide, pentothal, trilene and nupercaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Nitrous oxide, pentothal and tubarine	M.	3	—	—	—	—	—	—	—	—	—	1	—	1	1	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nitrous oxide, pentothal and tubocurarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Nitrous oxide, trilene and cocaine	F.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Novocaine	M.	4	2	—	—	—	—	—	—	—	—	—	—	—	—	2
	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Novutox	M.	3	—	—	—	—	—	—	—	—	1	—	—	—	—	2
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nupercaine	M.	9	—	—	—	—	—	—	—	—	—	3	1	—	1	4
	F.	5	—	—	—	—	—	—	—	—	1	—	1	—	—	3
Nupercaine and cyclopropane	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Omnopon and scopolamine	F.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Omnopon, scopolamine and cyclopropane	M.	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Pentothal	M.	53	—	—	—	—	1	1	1	1	—	3	2	5	7	32
	F.	44	—	2	—	1	—	1	1	—	1	3	2	2	10	21

Table CLIII(i).—(*contd.*)

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Pentothal and nupercaine	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—
	F.	4	—	—	—	—	—	—	—	—	—	—	1	—	1	2
Pentothal, omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Pentothal and tubarine	M.	10	—	—	—	1	—	—	1	—	2	—	1	—	1	4
	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Pentothal and tubocurarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Pentothal, tubocurarine and cyclopropane	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Percaine	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
Planocaine	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Procaine	M.	6	—	—	—	—	—	—	1	1	—	—	1	—	—	3
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Procaine and nembutal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Thiopentone	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Thiopentone and nitrous oxide	F.	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Thiopentone and tubarine	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Scopolamine and pentothal	M.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Vinesthene	F.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Anæsthetic (not stated)	M.	23	—	1	1	1	1	—	—	—	—	1	2	2	2	12
	F.	17	—	1	—	2	—	—	2	1	3	—	1	—	1	6
Total	**M.**	**406**	**16**	**44**	**9**	**16**	**10**	**5**	**10**	**9**	**6**	**19**	**17**	**22**	**61**	**162**
	F.	**315**	**7**	**24**	**4**	**13**	**5**	**7**	**18**	**16**	**13**	**17**	**16**	**24**	**54**	**97**

Table CLIII(ii).—Deaths, including those of non-civilians, under or connected with the administration of various Anæsthetics, according to Sex and Age, 1949.

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Adrenalin and amethocaine	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Adrenalin and nupercaine	F.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Adrenalin and procaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Amethocaine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	3	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Amethocaine, cocaine and decicaine	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Amethocaine, curare and pentothal	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Amethocaine and decicaine	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Amethocaine and procaine	M.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Atropine, curare, cyclopropane and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Atropine, morphine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Avertin, omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Chloroform	M.	3	—	1	—	—	1	—	—	—	—	—	—	—	—	1
	F.	3	—	—	—	—	—	—	2	—	1	—	—	—	—	—
Chloroform and avertin	F.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Chloroform and ether	M.	3	1	1	—	1	—	—	—	—	—	—	—	—	—	—
	F.	2	—	—	—	—	—	1	1	—	—	—	—	—	—	—
Chloroform, ether, adrenalin chloride and coramine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Chloroform, ether, nitrous oxide and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Chloroform and nitrous oxide	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Chloroform, nitrous oxide and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Cocaine	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Curare	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Curare and cyclopropane	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1

Table CLIII(ii).—(*contd.*)

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Curare, cyclopropane and pentothal	M.	11	—	—	—	—	—	—	1	1	—	—	3	4	1	1
	F.	5	—	—	—	—	—	—	—	—	—	—	—	1	1	3
Curare, cyclopropane and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Curare, cyclopropane and tubarine	M.	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Curare and nupercaine	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Curare and pentothal	M.	11	—	—	—	—	1	—	—	1	—	1	1	2	2	3
	F.	6	—	1	—	—	—	—	1	—	—	—	—	1	3	—
Curare and prostigmine	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Curare and thiopentone	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Curarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Curarine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Curarine and thiopentone	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cyclopropane	M.	11	2	—	—	—	—	—	—	1	—	—	—	1	5	2
	F.	5	—	1	1	—	—	—	1	—	—	1	—	—	1	—
Cyclopropane and nupercaine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cyclopropane, nupercaine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Cyclopropane, omnopon, pentothal and scopolamine	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Cyclopropane, omnopon, scopolamine and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Cyclopropane and pentothal	M.	17	—	—	—	—	1	—	1	1	1	1	2	3	5	2
	F.	13	—	—	—	—	—	—	1	1	1	2	—	1	3	4
Cyclopropane, pentothal and procaine	F.	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Cyclopropane, pentothal and tubarine	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
	F.	4	—	—	—	—	—	—	—	—	—	—	2	1	—	1
Cyclopropane, pentothal and tubocurarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Cyclopropane, thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cyclopropane, thiopentone and tubocurarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cyclopropane, thiopentone and vinesthene	F.	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Ether	M.	27	2	6	4	—	—	—	—	1	1	—	2	3	5	3
	F.	22	2	4	2	2	—	2	1	—	2	1	1	1	3	1
Ether, atropine and morphine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, curare and cyclopropane	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, curare, cyclopropane and pentothal	M.	2	—	—	—	—	—	—	—	1	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Ether, curare, nupercaine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ether, curare and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ether and cyclopropane	M.	2	—	—	—	—	—	—	1	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Ether, cyclopropane, omnopon, pentothal and scopolamine	F.	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Ether, cyclopropane and pentothal	M.	3	—	1	—	—	—	—	—	—	—	—	1	—	1	—
	F.	4	—	—	—	—	1	—	—	—	—	2	—	—	—	1
Ether, cyclopropane and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Ether and ethyl chloride	M.	30	3	17	7	—	—	—	—	—	—	1	—	—	1	1
	F.	14	2	9	1	—	—	—	—	1	1	—	—	—	—	—
Ether, ethyl chloride and atropine	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Ether, ethyl chloride, atropine, morphine and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, ethyl chloride, atropine and seconal	F.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Ether, ethyl chloride and nitrous oxide	M.	3	1	1	—	—	—	—	—	—	—	—	—	—	—	1
	F.	5	—	1	—	1	1	—	—	1	—	—	—	—	1	—
Ether, ethyl chloride, nitrous oxide and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	3	—	—	—	—	—	—	—	1	—	—	—	—	1	1
Ether, ethyl chloride, nitrous oxide and thiopentone	M.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ether, ethyl chloride and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether and nitrous oxide	M.	22	2	1	2	2	2	—	—	—	1	—	3	—	4	5
	F.	34	—	3	3	—	—	3	4	4	1	2	1	3	4	6
Ether, nitrous oxide, atropine and omnopon	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, nitrous oxide, atropine, omnopon and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, nitrous oxide and curare	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—

Table CLIII(ii).—(*contd.*)

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Ether, nitrous oxide, curare and cyclopropane	F.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Ether, nitrous oxide, curare, cyclopropane and pentothal	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Ether, nitrous oxide, curare and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	F.	5	—	—	—	—	—	1	—	—	—	—	2	—	1	1
Ether, nitrous oxide and cyclopropane	M.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Ether, nitrous oxide, cyclopropane and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, nitrous oxide, kemithal and tubocurarine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, nitrous oxide, nupercaine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether, nitrous oxide, omnopon, pentothal and scopolamine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, nitrous oxide, omnopon and scopolamine	F.	2	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Ether, nitrous oxide and pentothal	M.	19	—	1	—	—	—	—	1	—	1	1	1	3	4	7
	F.	14	—	—	1	1	1	—	—	—	—	1	1	1	6	2
Ether, nitrous oxide and thiopentone	M.	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Ether, nupercaine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ether and pentothal	M.	5	—	—	—	—	—	1	—	—	—	1	—	—	2	1
	F.	5	—	—	—	—	—	—	1	—	—	1	—	—	1	2
Ether, pentothal and tubarine	F.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Ether and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ether, thiopentone and tubocurarine	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Ether, tubarine and scopolamine	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Ether and vinesthene	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Ethyl chloride	M.	4	—	3	—	—	—	—	—	—	—	1	—	—	—	—
	F.	3	1	—	—	—	—	—	1	—	—	1	—	—	—	—
Ethyl chloride, atropine, morphia and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ethyl chloride and avertin	F.	2	—	—	—	—	—	—	—	—	—	2	—	—	—	—
Ethyl chloride, curare and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Ethyl chloride and cyclopropane	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Ethyl chloride and evipan	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Ethyl chloride and nitrous oxide	M.	10	—	1	1	—	2	—	1	1	—	—	—	—	1	3
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Ethyl chloride, nitrous oxide and curare	F.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Ethyl chloride, nitrous oxide, curare and pentothal	M.	2	—	—	—	—	—	—	—	—	—	—	1	—	1	—
Ethyl chloride, nitrous oxide and penthothal	M.	3	—	—	—	—	—	—	—	—	1	1	—	—	1	—
	F.	5	—	—	—	—	—	—	—	—	1	—	—	—	2	2
Ethyl chloride, nitrous oxide pentothal and tubarine	F.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Ethyl chloride, nitrous oxide and thiopentone	M.	2	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Ethyl chloride, nitrous oxide, thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Ethyl chloride and nupercaine	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Ethyl chloride and vinesthene	M.	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Kemithal	M.	3	—	—	—	—	—	—	—	—	—	1	—	—	1	1
Nitrous oxide	M.	13	1	—	—	—	—	—	—	—	—	1	1	1	3	6
	F.	11	—	—	—	—	1	—	—	1	1	1	1	—	2	4
Nitrous oxide and atropine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nitrous oxide, atropine, pentothal, prostigmine and tubocurarine	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Nitrous oxide and chlorocyclopropane	F.	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Nitrous oxide and curare	M.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Nitrous oxide, curare and cyclopropane	F.	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Nitrous oxide, curare, novocaine and pentothal	M.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Nitrous oxide, curare and pentothal	M.	9	—	—	1	—	—	—	—	—	—	—	2	3	1	2
	F.	3	—	—	—	—	—	1	—	—	—	—	—	—	—	2
Nitrous oxide, curare and trichlorethylene	M.	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Nitrous oxide and cyclopropane	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	F.	3	—	—	—	—	—	—	—	—	—	—	—	—	2	1

Table CLIII(ii).—(*contd.*)

Anæsthetic agent or combination of agents, as stated on the Coroner's Certificate		All Ages	Age (l.b.d.)													
			0–	1–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	65 and over
Nitrous oxide, cyclopropane and pentothal	M.	2	—	—	—	—	—	—	—	—	—	—	1	—	1	—
	F.	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Nitrous oxide, cyclopropane and thiopentone	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide, cyclopropane, tubarine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide and decicaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Nitrous oxide and novocaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nitrous oxide and nupercaine	M.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide nupercaine and pentothal	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nitrous oxide and paraldehyde	F.	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Nitrous oxide and pentothal	M.	18	—	—	—	—	—	—	—	1	2	1	3	2	2	7
	F.	15	—	—	—	—	2	1	—	1	—	2	—	1	5	3
Nitrous oxide, pentothal and tubarine	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
	F.	2	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Nitrous oxide and pethidine	M.	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Nitrous oxide and thiopentone	M.	2	—	—	—	—	—	—	—	—	—	—	1	1	—	—
	F.	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Nitrous oxide and trichlorethylene	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Nitrous oxide and tubarine	F.	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Novocaine	M.	5	—	—	—	—	—	—	—	—	—	—	1	—	3	1
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Novocaine and pentothal	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Novutox	M.	2	—	—	—	1	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	1	—	—	—	1	—
Nupercaine	M.	3	—	—	—	—	—	—	—	—	—	—	—	—	1	2
	F.	8	—	—	—	—	—	—	—	1	—	—	1	1	—	5
Nupercaine, methedrine and pentothal	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Nupercaine and pentothal	M.	4	—	—	—	—	—	—	—	—	—	1	—	—	—	3
Omnopon and scopolamine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Pentothal	M.	50	—	—	—	1	—	1	1	—	1	6	2	3	16	19
	F.	34	—	—	—	—	—	3	3	—	2	2	1	2	9	12
Pentothal and procaine	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Pentothal and thiopentone	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Pentothal and tubarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	2	—	—	—	—	—	—	—	—	1	—	—	—	—	1
Pentothal and tubocurarine	M.	2	—	—	—	—	—	—	—	—	—	—	1	—	1	—
	F.	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
Percaine	F.	2	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Procaine	M.	4	—	1	—	—	—	—	—	—	—	—	—	—	1	2
	F.	2	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Thiopentone	M.	2	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	F.	5	—	—	—	—	—	1	—	1	1	—	—	—	1	1
Thiopentone and tubarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
	F.	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Thiopentone and tubocurarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Tubarine	M.	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	F.	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Anæsthetics not stated	M.	6	—	1	—	—	—	—	—	1	—	—	—	4	—	—
	F.	8	—	—	—	—	—	—	3	—	1	—	1	—	—	3
Total	**M.**	**389**	**12**	**40**	**16**	**9**	**8**	**2**	**7**	**9**	**14**	**23**	**31**	**37**	**81**	**100**
	F.	**315**	**6**	**22**	**10**	**4**	**6**	**17**	**21**	**15**	**18**	**22**	**17**	**22**	**61**	**74**

Table CLIV aggregates the deaths from certain long-established primary inhalational anæsthetics (ether, nitrous oxide, ethyl chloride and chloroform), administered singly or in combination as mixtures with or without associated drugs, for three-year periods from 1928–30 and for each of the years 1940 to 1949.

Table CLV classifies the anæsthetic deaths in 1948 and 1949 in accordance with the underlying disease to which the death was assigned. In most cases this was the disease for which treatment requiring an anæsthetic was given. Comparisons with the corresponding table for previous years may show a rising number of deaths associated with some diseases while fewer deaths are recorded for others. These differences generally reflect the changing frequency with which operative treatment requiring anæsthesia is carried out.

Table CLIV.—Deaths, including those of non-civilians, under or associated with the administration by inhalation of certain Anæsthetics, 1928-30, 1931-33, 1934-36, 1937-39 and each year 1940 to 1949.

	Sex	1928–30	1931–33	1934–36	1937–39	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Chloroform(1)	M.	189	162	105	68	15	21	17	14	14	8	7	4	3	5
	F.	114	104	97	97	16	21	16	14	11	12	6	7	4	4
Ether (alone) (2)	M.	355	344	303	253	76	100	64	71	54	58	52	37	28	27
	F.	341	312	267	245	69	69	44	50	59	44	38	37	27	22
Ether and nitrous oxide (only) ..	M.	31	54	122	213	82	89	70	89	82	70	56	44	37	22
	F.	18	35	104	181	66	68	76	82	71	73	65	50	40	34
Chloroform and ether (1) ..	M.	351	320	272	173	39	36	35	26	15	14	15	5	3	3
	F.	260	234	194	126	35	24	23	24	9	15	10	6	6	2
A.C.E. Mixture	M.	9	17	7	9	1	2	—	—	1	—	—	1	1	—
	F.	9	6	9	2	3	—	—	—	—	2	1	1	—	—
Ether and ethyl chloride (1) ..	M.	37	83	123	162	41	51	49	43	36	41	39	31	31	33
	F.	36	55	111	110	21	38	25	31	36	30	25	21	22	19
Other mixtures containing chloroform or ether (3)	M.	19	16	29	37	13	19	28	18	22	20	26	36	44	54
	F.	12	30	39	44	13	15	24	25	17	22	21	40	24	51
Ethyl chloride	M.	19	18	33	38	10	9	9	21	14	15	19	12	12	4
	F.	10	22	24	33	4	5	5	8	10	12	11	17	3	3
Nitrous oxide (alone)	M.	68	91	112	131	58	36	39	33	25	34	19	17	21	13
	F.	41	73	99	138	47	44	35	33	25	20	15	17	18	11

(1) Including combinations with nitrous oxide, as in corresponding lines of this table in previous years.
(2) The corresponding line of this table in years before 1938 included ether with nitrous oxide, now shown separately.
(3) Including combinations of chloroform or ether with morphia, atropine, nembutal or cocaine derivatives or substitutes.

Table CLV.—Classification of Deaths, including those of non-civilians, under or associated with Anæsthesia, 1948 and 1949.

International List No.	Cause to which death was assigned	1948		1949	
		M.	F.	M.	F.
13b	Respiratory tuberculosis	3	6	—	—
14–22	Non-respiratory tuberculosis	2	2	3	1
45–55	Cancer	67	15	75	55
56a, b, c	Non-malignant tumours of female genital organs	—	14	—	12
56d, e	Other non-malignant tumours	7	10	7	2
63a	Simple goitre	2	3	2	5
63b	Exophthalmic goitre	2	6	3	5
88	Diseases of the organs of vision	5	4	2	4
89	Diseases of the ear and mastoid antrum	7	3	6	—
98	Gangrene	5	7	4	2
102	High blood pressure	2	4	—	—
106b	Bronchiectasis	5	5	—	—
115a	Diseases of the teeth and gums	7	6	10	10
115b, c	Diseases of the pharynx and tonsils	14	13	9	5
117	Ulcer of the stomach or duodenum	39	3	45	7
118	Other diseases of the stomach	1	—	—	—
121	Appendicitis	22	16	16	23
122a	Hernia	25	12	24	10
122b	Intestinal obstruction	15	6	13	9
123	Other diseases of the intestines	5	4	4	4
126	Biliary calculi	4	7	1	6
127	Diseases of the gall bladder	3	13	3	6
129	Peritonitis	—	—	1	—
130–133	Diseases of the kidney	1	5	5	2
134	Calculi of the urinary passages	3	4	1	1
135–136	Diseases of the bladder or urethra	5	4	—	—
137	Diseases of the prostate	43	—	29	—
138 pt.	Circumcision	3	—	8	—
138 pt.	Other diseases of the male genital organs	8	—	—	—
139	Diseases of the female genital organs	—	15	—	16
140–150	Childbirth and abortion	—	26	—	31
151–153	Diseases of the skin and cellular tissue	—	—	4	2
154–156	Diseases of the bones and joints	8	5	2	5
157	Congenital malformations	19	12	15	11
*163–198	Violence	42	25	34	26
	Other causes	32	24	63	55
	All causes	**406**	**315**	**389**	**315**

* Excluding one female death in 1948 and one male and two female deaths in 1949 assigned to 195ba, anæsthetic accidents, which are included in Other causes.

Previous Reviews have emphasized the very limited value of these anæsthetic tabulations, for the numbers of persons of each sex and age receiving anæsthetics of different types are unknown. Unless the deaths happening during the various forms of anæsthesia can be related to these "populations", it is impossible to compare the risks attached to different anæsthetics, which are employed with changing frequency as the years go by. Citing the numbers of crude deaths by themselves can lead to very erroneous conclusions. For example the number of elderly persons over 65 dying under an anæsthetic has more than doubled since 1930–35. But it is well known that advances in anæsthetic and surgical practice during the last 20 years have made it possible to perform major surgery on cases formerly regarded as inoperable on account of their age.

Could deaths be related to the number of operations, it might be found that there was now less risk of an elderly patient dying during a surgical operation while under an anæsthetic than previously.

Other difficulties attending the analysis of anæsthetic deaths would remain, however, even if the population at risk could be ascertained. An adequate evaluation of the risks attendant on different anæsthetics must take account of them. Two are of particular importance. Firstly, deaths due directly or indirectly to the anæsthetic cannot always be distinguished from deaths due to other circumstances associated with the operation or diagnostic procedure, such as its length, or the amount of body fluid lost. Secondly, the risks from some groups of anæsthetic are more or less immediate, so that fatalities arising from their use are almost certain to be recorded as anæsthetic deaths. Other groups, on the contrary, may have a more remote risk, for example a tendency to post-operative pneumonia, and fatalities due to such " delayed " anæsthetic risks may not always be deemed anæsthetic deaths, as the extent to which the anæsthetic is implicated in any individual case may be a matter of opinion.

Medical certification.—In 1927 certain changes were introduced in the procedure of death registration to provide that, when the medical practitioner in attendance upon the deceased during his last illness had not seen the deceased within fourteen days before the date of death and had not seen the body after death, the death could only be registered after the case had been reviewed by a coroner.

An undertaking was given at that time that statistics would be prepared regularly to show to what extent the proportion of cases seen or not seen after death was altering. Detailed analyses were therefore published in the Reviews for 1928 and 1933 and broad figures for the years 1929 to 1932 and 1934 to 1937. The following table gives the percentages in each category for the years 1948 and 1949 compared with those in earlier years, the figures for 1948 and 1949 being based on an examination of a sample of one medical certificate in seven.

	1928	1933	1947	1948*	1949*
Seen after death	51·0	53·7	60·9	62·2	63·3
Inquest or Coroner's P.M. without Inquest, or other cases reviewed by Coroners	*11·2*	*11·2*	*14·0*	*14·9*	*15·7*
Cases certified by Medical Practitioners	*39·8*	*42·5*	*46·9*	*47·3*	*47·6*
Not seen after death	48·5	46·1	38·8	37·2	36·3
No statement	0·5	0·2	0·3	0·4	0·4
Total	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
Total deaths in year	**460,389**	**496,465**	**517,615**	**469,898**	**510,736**

* Estimated from a Sample of Medical Certificates.

In some cases it is probable that the certifying practitioner sees the body after signing the medical certificate of cause of death. Such cases will be recorded as " Not seen after death " ; the proportions shown in the above table as " Seen after death " may therefore be slightly too low.

APPENDIX A.—INTERNATIONAL HEALTH STATISTICS

International Statistical Classification of Diseases, Injuries, and Causes of Death

In the Statistical Review Text for 1946–47 (Volume I, pp. 1–2) some account was given of the preliminary work carried out, mainly under Anglo-U.S.-Canadian auspices, in preparing for the sixth revision of the International Lists of Causes of Death. Because of the problems involved in producing a single and completely new classification to be used, for the first time in the history of such classifications, for morbidity as well as for mortality purposes these efforts had been on an unusual scale. 1948 saw their fruition at a conference in Paris and at the First World Health Assembly, when the World Health Organization adopted the proposed new classification together with regulations governing its application and use. The changes in classification which were introduced are shown in Appendix C.

Paris Conference

In accordance with a Convention signed at the 5th Revision (1938) Conference, which had formally recognised the continued desirability of decennial revision, the French Government convened in Paris, from 26th to 30th April, 1948, the " International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death ". Twenty-nine countries, as well as the World Health Organization and the International Labour Office, were represented at this Conference. The United Kingdom delegation, the membership of which is shown at the end of this Appendix, was led by the Registrar General. The Conference opened with an address of welcome by the French Foreign Minister, Monsieur Georges Bidault. Professor A. M. Baudoin, Dean of the Faculty of Medicine and Secretary General of the Academy of Medicine, leader of the French delegation, was elected President on the proposal of the Registrar General and presided over the opening and closing business sessions. The four Vice-Presidents, of whom the Registrar General was one, presided in turn over intervening sessions. In practical recognition of the intensive preparatory work from 1945 onwards, the Conference achieved in a short time a close unanimity of view on the new Classification itself and on other matters affecting future international co-operation in health statistics.

The conclusions of the Conference[1] were expressed in the form of (*a*) a Convention to which were attached a number of recommendations addressed to the World Health Assembly and to the Expert Committee of the World Health Organization Interim Commission, and (*b*) a series of resolutions which set out in some detail the results of discussions on the use of the new Classification and on the international development of health statistics through this and other means. Under the Convention the World Health Organization was recognised as being entrusted by its Constitution with the function of establishing and revising international nomenclatures and classifications of dseases and causes of death ; and the " International Statistical Classification of Diseases, Injuries and Causes of Death ", adopted by the Conference as the Sixth Revision of the International Lists, was submitted to the World Health Assembly for consideration and action. This Conference was therefore accepted as being the last of the series of independent decennial Conferences convened by the French Government. Future revisions and developments are in the care of the World Health Organization, which thus brings together medical statistics and the

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[1] Report of the International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death. W.H.O. Official Records No. 11, pp. 23–32.

clinical and other forms of medicine which contribute to the production of medical statistics and profit by their use. This integration had long been desired by the General Register Office and the Ministry of Health and had been an object of United Kingdom policy in the discussions which led to the establishment of the World Health Organization.

The recommendations of the Conference to the first World Health Assembly were concerned with (*a*) the various lists of causes of death, including the detailed list, an "intermediate list" of 150 causes (for tabulations by age, etc.), an "abbreviated list" of 50 causes (for tabulations by administrative divisions of a country), and a special list of 50 causes (for tabulation of morbidity for social security (insurance) purposes); (*b*) the form of medical certificate of cause of death proposed by the Expert Committee, a form which corresponded with that in use in England and Wales, except that it also asked for the duration of illness; (*c*) the rules for selecting the underlying cause of death when more than one cause is stated on the certificate, and the form of multiple cause tabulation; (*d*) the manner of publication of the Classification; (*e*) suggested methods of furthering international co-operation in health and vital statistics, including the establishment by the World Health Organization of a continuing expert committee on health statistics with certain specific problems for study, the formation by Governments of national committees for the purpose of co-ordinating activities in health statistics in each country, and the development of the World Health Organization's own statistical service; (*f*) special studies in different countries of specified subjects, *e.g.*, cancer registration in the United Kingdom, Denmark, France, Norway and Switzerland, and fœtal death (stillbirth) statistics by the United Kingdom and the United States of America; (*g*) regulations governing the use of the Classification and lists; and (*h*) the operative date for the Classification, namely, 1st January, 1950. (It was suggested, however, that where possible parallel tabulations according to both the old and new lists should be published for 1949 or 1950. In this country 1949 deaths were coded according to both lists, and the 1949 tabulations according to the new list will be found in Appendix C.)

The Conference empowered the Expert Committee of the World Health Organization to establish the final form of (*a*) the Classification and the various lists based upon it, taking into account the amendments proposed at the Conference, but without, of course, changing their basic structure; (*b*) the medical certificate of cause of death; (*c*) the rules of selection from multiple causes; and (*d*) the tabulations for presenting multiple causes.

A corollary to the adoption of the "Intermediate List" was that, after the Conference, representatives of Governments who were parties to the 1934 International Agreement relating to Statistics of Causes of Death signed a protocol establishing the new "Intermediate List" in place of the Intermediate List of 1938 as the minimum standard for compiling and publishing mortality statistics. This procedure was a necessary preliminary to denouncing the 1934 Agreement in order that it might be replaced by Regulations to be made under the Constitution of the World Health Organization.

Expert Committee

The third and last session of the Expert Committee of the World Health Organization Interim Commission was held immediately after the Paris Conference, from 4–7th May, 1948, at Geneva, under its chairman, Dr. Percy Stocks of the General Register Office. Some meetings were held jointly with the Index Sub-Committee to discuss the completion of the index to the International Classification. The members of the Committee and Sub-Committee

are listed in Appendix F to the Statistical Review, Text, 1946–47, Volume I. At this session the Committee took a number of decisions on the form and contents of the published version of the Classification, the amendments proposed at the Paris Conference, the tabular list of terms included under each rubric of the Classification, and on the other matters referred to it by the Conference, as described above. The Committee also drew up, for circulation to Governments for study and comment, draft regulations governing the use of the Classification, to be elaborated and adopted by the World Health Assembly. The recommendations of the Expert Committee were approved by the Interim Commission at an informal preparatory meeting (18th–23rd June, 1948) and transmitted to the First World Health Assembly.

First World Health Assembly

The World Health Organization was constituted on 7th April, 1948, when the requisite number of Member States had deposited their formal instruments of acceptance with the Secretary-General of the United Nations. (The United Kingdom had been, with China, the first country to deposit its ratification, on 22nd July, 1946.) The First Assembly of the Organization was held in Geneva from 24th June to 24th July, 1948. H.M. Government nominated the Registrar General as a Delegate to the Assembly and he was accompanied and assisted by Dr. Percy Stocks in a corresponding capacity.

In brief, the Assembly's decisions in the field of health statistics were to (*a*) approve the International Statistical Classification of Diseases, Injuries and Causes of Death ; (*b*) pass the first legislative enactment to be made under the Organization's Constitution, namely the Nomenclature Regulations, 1948, governing the use of the Classification ; (*c*) authorise the establishment of an Expert Committee on Health Statistics (*see* below), and (*d*) set up a section on health statistics as part of the Organization's Secretariat.

It was made clear that these decisions were but steps towards the effective use of statistics in guiding national and international health work in the war on disease. In addressing the Programme Committee of the Assembly after they had adopted the proposals above, the Registrar General said that he wished to underline that, in its consideration of health statistics, the Committee had done three notable things. In the first place, it had approved the first set of regulations (on any subject) to come before the World Health Organization. Secondly, it had married to the Organization the series of independent conferences which had been going on for many years under the ægis of the French Government. It was a good marriage, because it would help to bring together clinicians, public-health officers and statisticians, with profit to all of them. Thirdly, in approving the establishment of an advisory committee on statistics and an adequately-staffed section of the Secretariat, the Committee on Programme had forged for itself a very sharp weapon for its attack on disease. Its programme must be founded not merely on statistics, but on good statistics, because sometimes statistics would show that a problem which appeared enormous was not a problem at all, and wasteful and unprofitable expenditure would be avoided. He felt that the more the work of the United Nations was interpenetrated with the clinical and statistical approach, the more useful and fruitful results would be achieved.

The Assembly also endorsed the principle contained in the recommendations of the Paris Conference about national committees on vital and health statistics. The position of the United Kingdom on this was reserved, as it was not accepted that a special national committee was necessarily appropriate in this country, where other and less formal arrangements were in force or contemplated for

securing co-ordination of departmental and technical opinions : for example, an interdepartmental committee, known as the Population and Vital Statistics Working Party, is part of the Government machinery for co-ordinating action in this country in relation to International Organizations and is a clearing house for securing unanimity of policy on health statistics in the United Kingdom, and representative professional advice is available through the Registrar General's Advisory Committee on Medical Nomenclature and Statistics (*see* Appendix B), which to some extent is the successor of the *ad hoc* Medical Advisory Committee which played a large part in the revision of the International Classification (*see* Text Volume referred to above).

W.H.O. Nomenclature Regulations[2]

The Nomenclature Regulations, based on the recommendations of the World Health Organization Interim Commission Expert Committee and the Paris Conference, set out the procedure to be followed in compiling mortality and morbidity statistics and are a necessary adjunct to the International Classification. Having been adopted by the World Health Assembly, they were under the Organization's Constitution binding upon all member States unless reservations were made to the Director-General within one year. It was not found necessary to make any reservations on the part of the United Kingdom, beyond an assumption about the interpretation of Article 8, dealing with infant mortality statistics by age.

The regulations supersede the conventions adopted at the five earlier revision conferences, and have the same legal force, within the limits of the Constitution. Their adoption forms a landmark in the history of international health activities since it is the first time that an international health body has formulated and accepted legislation of this kind. This change in the machinery for securing adherence to the International Lists should enable revisions and amendments to be made somewhat more readily than was possible before.

Expert Committee on Health Statistics (First Session)

The World Health Organization Expert Committee on Health Statistics was set up, in common with other expert committees of the Organization, to act as an advisory body. The number of members was fixed as five, but provision for co-opting other specialists and for the setting up of specialised sub-committees also existed. The members of the Committee and co-opted members at the first session are shown at the end of this Appendix. The first session was held at Geneva from 23rd–28th May, 1949. Of the recommendations in the report on this session[3] the following may be mentioned. A World Health Organization " clearing centre " for statistical research on problems arising in the application of the International Classification was advocated ; it may be noted here that such a centre came into being in 1951 and is located at the General Register Office, where appropriate material from statistical records is used in practical checks on taxonomic conclusions. It was recommended that closer study should be made, through the medium of sub-committees, of (*a*) the problems of defining stillbirth and abortion, in view of the diversity of definitions in use in different countries ; (*b*) the registration of cancer cases and their

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[2] W.H.O. Regulations No. 1 Regarding Nomenclature (Including the Compilation and Publication of Statistics) with respect to Diseases and Causes of Death. W.H.O. Official Records No. 13, Annex 1 ; and Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, Vol. I, pp. 371–376.

[3] W.H.O. Technical Report Series, No. 5.

statistical presentation ; and (*c*) the action to be taken in the field of hospital statistics, in particular the application of the International Classification. These sub-committees were set up in 1950. Other recommendations concerned the fostering of the activities of national committees (or their equivalents), health statistics in underdeveloped areas, and the teaching of statistical method in medical schools, etc.

Second World Health Assembly

The Second World Health Assembly took place in Rome from 13th June to 2nd July, 1949. The Registrar General's deputy, Mr. A. E. Joll, was present for part of the session as adviser to the United Kingdom delegation. The Assembly adopted the recommendations of the Expert Committee as outlined above and the Organization's programme of work in health statistics was modified accordingly. The Assembly also adopted, as a result of United Kingdom initiative, a general resolution which enjoined the fullest possible use of statistics and statistical method in the planning and conduct of field or laboratory investigations and action carried out by the World Health Organization or with its assistance, as well as in the evaluation of their results. The Director-General of the Organization was also requested to examine the adequacy of his existing administrative arrangements in the health, epidemiological, medical, and vital statistics sphere. The outcome of this examination was the raising of the health statistics side of the Headquarters Secretariat to the status of a separate Division. Another decision of this Assembly was to adopt the Nomenclature (Supplementary) Regulations, 1949,(4) by which Article 20 of the original Regulations was amended in order to give new States Members a period of one year from the date of notification of the Regulations to them in which to make reservations.

International Conference for the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death, Paris, 1948

(*a*) *Countries represented :—*

Belgium
Bulgaria
Canada
Chile
Cuba
Czechoslovakia
Denmark
Ecuador
Ethiopia
France
Greece
Guatemala
Hungary
Iceland
India
Irish Republic
Italy
Luxemburg
Mexico
Netherlands
Norway
Poland
Portugal
Siam
Sweden
Switzerland
United Kingdom
United States of America
Venezuela

(*b*) *Membership of United Kingdom Delegation :—*

Dr. George North, M.C., Registrar General of England and Wales.
Sir E. Rock Carling, F.R.C.S., F.R.C.P., Chairman of the Registrar General's Medical Advisory Committee.
L. M. Feery, General Register Office.
J. G. Kyd, C.B.E., Registrar General for Scotland.
Dr. P. L. McKinlay, General Registry Office, Scotland.
Dr. Percy Stocks, General Register Office.
P. J. Cook, General Register Office (Secretary to the Delegation).

(4) W.H.O. Official Records, No. 21, Annex 13.

World Health Organization Expert Committee on Health Statistics (First Session, May, 1949)

(*a*) *Members :—*

D. Curiel, Dr. P. H., Ministry of Health and Social Welfare, Venezuela.

P. F. Denoix, M.D., Institut National d'Hygiène, France.

H. L. Dunn, M.D., National Office of Vital Statistics, United States of America.

K. Kacprzak, M.D., State School of Hygiene, Warsaw, Poland.

P. Stocks, C.M.G., M.D., F.R.C.P., General Register Office.

(*b*) *Co-opted Members :—*

Julie E. Backer, Sc.D., Central Statistical Office, Norway.

Professor L. Hersch, University of Geneva, Switzerland.

Professor J. Rasuhin, University of Zagreb, Yugoslavia.

(Professor J. Heyman, Radiumhemmet, Stockholm, also assisted at the discussion on cancer statistics.)

APPENDIX B.—ADVISORY COMMITTEE ON MEDICAL NOMENCLATURE AND STATISTICS

Report (dated 2nd March, 1951) on the Work of the Committee, November, 1948 to November, 1950

1. Introductory.—Throughout the period, now more than 100 years, during which the General Register Office has been concerned with the preparation and analysis of medical statistics, the Registrar General has from time to time sought the help of medical experts outside the Department for advice on various aspects of the work and such help has been freely given. As on an earlier occasion, a Medical Advisory Committee was appointed in October, 1946, to consider from the medical point of view and to advise upon the alterations to be suggested by H.M. Government at the sixth (1948) decennial revision of the International List of Causes of Death. This Committee completed its work in January, 1947. The World Health Organization had, at its First Assembly in July, 1948, assumed effective responsibility for the International List (now expanded to include diseases and injuries not likely to lead to death) and it was intended that changes found necessary in the classification should be made from time to time without waiting the hitherto normal ten years for full revision of the list. It was against this background, and in the knowledge that the General Register Office was accepting additional responsibilities both national and international in the field of morbidity statistics, that the Registrar General, after consultation with the Ministry of Health and the Presidents of the Royal Colleges and others, appointed in November, 1948, a standing Advisory Committee on Medical Nomenclature and Statistics " to consider from the medical point of view and to advise upon questions affecting the International Statistical Classification of Diseases, Injuries and Causes of Death and any other matters concerning medical nomenclature or statistics which may from time to time be referred to the Committee ". The membership of the Committee is shown at the end of this Report.

2. Functions of the Committee.—The work of the Committee can conveniently be considered under three heads :—

(i) Advice on problems in connection with the International Classification ; this arises directly from the first part of the Committee's terms of reference.

(ii) Advice on problems arising from the broader field of international co-operation in medical statistics.

(iii) Advice on problems in medical statistics arising specifically in, or of concern to, the work of the General Register Office, the Ministry of Health and other Departments, including questions of applying international agreements.

3. The International Classification.—In this sphere the Committee has so far been concerned mainly with the problem of extending the Classification to cover operations and anæsthetic procedures. The need for such an extension was raised at the first meeting of the Committee and was accepted by the World Health Organization Expert Committee at their second session in April, 1950. In the meantime, the Committee advised at their third meeting, in May, 1949, that the general plan of the classification should be discussed with United States experts to ensure that there would be no serious conflict on this point when an International classification comes to be drawn up. They also approved the names of specialists to whom reference might be made for obtaining lists of

operations which should be included in different groups. Grateful acknowledgement is made to those specialists who supplied lists. At a meeting in June, 1950, the Committee approved a framework for the code, based on anatomical site of the operation, which followed similar lines to codes in use in the U.S.A. A draft tabular list was approved by the Committee in November, 1950, for a limited trial in a few hospitals, so that practical experience of its use could be gained. An index is now in course of preparation. At their meeting in June, 1950, the Committee recommended that a separate code for anæsthetic procedures should be prepared and this is now being done.

Other problems in the use of the Classification which the World Health Organization have suggested for study concern difficulties in classifying neoplasms and the adaptation of the Classification to serve as an index of medical records by diagnosis. Information on these matters is being collected.

The establishment by the World Health Organization in collaboration with the General Register Office, on the 1st January, 1951, of a Centre for statistical research on problems arising in the use of the International Classification will no doubt have its impact on the work of the Committee in due course.

4. Other International Problems.—The Conference for the Sixth Revision of the International List of Causes of Death had asked the United Kingdom and the United States to study the problem of establishing a borderline between live birth and stillbirth and between stillbirth and abortion by collecting data on the probabilities of survival at different durations of gestation. This problem was referred to the Committee at their first meeting when the necessity of collecting information on survival rates according to estimated period of gestation and birth weight was generally accepted and it was recommended that information should be collected from a number of large centres. At their next meeting the Committee advised upon the form of tables which should be sent to these centres for completion and members of the Committee offered assistance through personal contact with the centres concerned. Preliminary information derived from these tables assisted in the consideration of proposals for definitions of live birth and fœtal death which were submitted to the Committee in November, 1949, prior to the meeting of a Sub-Committee of the World Health Organization Expert Committee on Health Statistics who were to recommend definitions for international adoption. The Committee referred the proposed definitions to the Royal College of Obstetricians and Gynæcologists and to the British Pædiatric Association whose preference for the word " fœtus " rather than " product of conception " was considered by the Committee in February, 1950. The Committee suggested that an amendment to this effect might be pressed at the meeting of the World Health Organization Sub-Committee but the Sub-Committee did not in fact accept such an amendment. The definitions finally adopted by the Third World Health Assembly are given at the end of this Report.

Other proposals dealt with at the same time, and also referred to the Royal College of Obstetricians and Gynæcologists and the British Pædiatric Association, were that rates of fœtal death for international use should be based on *live* births and that a standard form of certificate of fœtal death should be adopted internationally. On the first of these, the Committee recommended that the proposal should be supported provided it did not preclude the use of *live and still* births as the denominator in national statistics. On the second proposal the Committee considered that the form of certificate suggested was too complicated and that, in any case, it would be premature to adopt a rigid international pattern. These views were considered by the World Health Organization Sub-Committee and incorporated in their recommendations.

Two of the projects suggested by the World Health Organization Expert Committee for further study concerned the collection of information to supply a statistical basis for a satisfactory definition of immaturity, and the classification of fœtal deaths when more than one cause is stated. A preliminary study of the first is being made on the basis of the information already collected on period of gestation and birth weight in relation to survival, while material from Scottish stillbirth certificates is being prepared for the second.

Certain other problems suggested by the Expert Committee for study will be considered by the Committee when material at present being collected becomes available.

5. Problems arising within the United Kingdom.—Most of the problems considered under this head are closely connected with some of those discussed in the international field, either because they involve the application of international recommendations in this country or because their existence in this country has provoked international discussion.

(1) *Registration of causes of stillbirth.*—Arising from discussion of the definition of stillbirth at their first meeting, the Committee expressed the opinion that the Registrar General should be asked to consider the possibility of obtaining general registration of the causes of stillbirth in England and Wales as in Scotland in order to provide further information bearing on variations in the stillbirth rate. This matter, which involves legislation, is being considered by the General Register Office with the Ministry of Health.

(2) *Morbidity study of hospital in-patients.*—The Committee took note at their first meeting of the arrangements made for the preliminary study and of the form to be used in collecting information about in-patients discharged from teaching and certain other hospitals from the beginning of 1949. At later meetings possible difficulties in relation to confidentiality were discussed but it was considered that no serious difficulties should arise. In considering a paper describing a series of courses which had been held at the General Register Office for instructing medical records officers and others in the use of the in-patient summary form and the use of the new International Classification, the Committee expressed the hope that the General Register Office would continue to give help and advice in these matters. In November, 1950, the Committee considered some preliminary figures derived from the enquiry which indicated some of the difficulties which had been encountered; in the light of these they supported certain minor amendments to the summary form which the General Register Office were considering in relation to 1951 discharges.

(3) *Cancer Registration Scheme.*—The Committee took note at their first meeting of progress made in this scheme for collecting information on a national scale about methods of treatment and their results, which, so far as England and Wales were concerned, had been taken over by the General Register Office from the Radium Commission at the beginning of 1947. The Committee has since given advice on ways and means of securing an extension of the scheme to cover a larger proportion of cases generally and, in particular, of those not treated by radiotherapy. The General Register Office and the Ministry of Health have co-operated in putting these into effect. On the specific question of following-up cases of rodent ulcer, the Committee advised that the General Register Office should press for continuing follow-up for more than a year after registration.

(4) *Mental Health Statistics.*—At their second meeting the Committee discussed the arrangements which had been made between the General Register Office and the Ministry of Health and Board of Control for the collection of detailed statistics of patients treated in mental hospitals and mental deficiency institutions. Tables relating to the first year's results are being prepared and will be submitted to the Committee for comment.

(5) *Statistics derived from General Practitioners' Records.*—In May, 1949, a proposal for collecting, on an experimental basis, information from records of patients treated in general practice was submitted to the Committee with a view, ultimately, to supplementing existing sources of national morbidity data. At that time the Committee expressed the view that the proposal was then inopportune and further consideration was given to it in February, 1950, when it was agreed that a pilot enquiry, with flexibility in the method of record keeping, designed to ascertain what statistical information could be derived from such records was desirable. This enquiry has now started.

(6) *Medical Certificate of Cause of Death.*—To secure greater uniformity in the method of certifying causes of death and thereby greater uniformity in mortality statistics, the first World Health Assembly had adopted a model form of certificate to be used by Member States of the World Health Organization. The model form is, in effect, the same as that which was already used in England and Wales with the addition of a column providing for statements of the approximate intervals between onset of illness and death. The Committee approved of the adoption of the model form on the understanding that the additional information would not be inserted in the death registers.

In order to secure that better provision should be made in medical schools for instruction in completing the medical certificate of cause of death, the Committee advised the Registrar General to approach the General Medical Council with a view to some instruction in the subject being given during the interne year. The Committee also suggested that the General Medical Council might arrange for a specimen certificate book and a pamphlet (on the lines of an extract from the Registrar General's Statistical Review for 1940–45, Text Part I, Medical describing common defects in certification) to be sent to all newly registered medical practitioners. These proposals have been submitted to the Council.

(7) *Statistical Publications of the General Register Office.*—Members of the Committee were invited to make suggestions about the presentation and scope of the statistical publications of the General Register Office. As a result of suggestions made, abridged life tables are now being published for each year in the Annual Reviews, those for 1948 and 1949 also being published in advance in the Quarterly Return for the September quarter, 1950; numbers of neo-natal deaths and stillbirths in each administrative area are being published in the Annual Reviews for 1949 and subsequent years; and consideration is being given to preparing more regular data on infant mortality and stillbirths by social class.

6. Future Work.—Difficulties in the use of the International Statistical Classification are only now beginning to emerge as results based on its use become available, and, in the light of morbidity and mortality tabulations, it will be possible to consider in what ways the classification requires modification or amendment.

It is clear from the section of this report dealing with other International problems that, for many of these, material is being collected which will be referred to the Committee; no doubt other problems will arise as the work of the World Health Organization and its Expert Committee on Health Statistics continues.

The morbidity enquiries which the General Register Office has undertaken since the war are still mainly in the formative stage and for some of them the first results are only now becoming available. These bring to light many problems in the solution of which the Committee will be able to make its contribution. There is great need for a synthesis of the material available from these enquiries with any other data that may bear upon the measurement of morbidity, *e.g.*, insurance records. The Committee will also have its part to play in the search for such a synthesis.

Members of the Committee

Sir Ernest Rock Carling, F.R.C.S., F.R.C.P. (*Chairman*).
J. Boyd, Esq., C.B.E., M.D., F.R.C.P.I., K.H.P., (from 16th August, 1950).
Sir Allen Daley, M.D., F.R.C.P., K.H.P.
Professor Ernest Finch, M.S., M.D., F.R.C.S.
F. H. K. Green, Esq., C.B.E., M.D., F.R.C.P.
C. F. Harris, Esq., M.D., F.R.C.P.
Professor A. Bradford Hill, D.Sc., Ph.D.
A. E. Joll, Esq.
Professor A. J. Lewis, M.D., F.R.C.P.
A. Massey, Esq., C.B.E., M.D., K.H.P.
P. L. McKinley, Esq., M.D., F.R.S.(Ed.).
Professor W. C. W. Nixon, M.D., F.R.C.S., F.R.C.O.G.
W. N. Pickles, Esq., M.D., M.R.C.P.
A. H. T. Robb-Smith, Esq., M.D., M.R.C.P.
Percy Stocks, Esq., C.M.G., M.D., F.R.C.P.
Professor R. E. Tunbridge, O.B.E., M.D., F.R.C.P.
Sir Lionel Whitby, C.V.O., M.C., M.D., F.R.C.P.
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J. Pennybacker, Esq., F.R.C.S.
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Sir James Paterson Ross, K.C.V.O., M.S., F.R.C.S.
J. C. Scott, Esq., F.R.C.S.
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Certain members of the Committee also gave advice in a specialist capacity.

World Health Organization. Definitions of Live Birth and Fœtal Death

Live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached ; each product of such a birth is considered live born.

Fœtal death is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy ; the death is indicated by the fact that after such separation the fœtus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

Note.—*The question of any action which may be necessary or desirable in regard to these recommended definitions is under consideration by the General Register Office in consultation with the Ministry of Health.*

APPENDIX C.—1948 INTERNATIONAL STATISTICAL CLASSIFICATION—COMPARABILITY WITH 1938 LIST.

The inclusion in the new International Statistical Classification (6th Revision in 1948) of groups relating to causes of morbidity as well as of mortality, together with revisions resulting from modernisation of the list, has resulted in a document of much greater length and detail than its predecessor, the 1938 International List, and one in which there has been considerable re-allocation of causes. Consequently, adoption of the new classification in 1950 will seriously affect continuity of statistics of mortality by cause. In countries which were using a form of death certificate and principles of selection of the assigned cause different from those now prescribed by the World Health Organization regulation (*see* Appendix A), the question of comparability with past statistics may prove to be one of great difficulty, owing to the threefold disturbances resulting from changes in the form of certification, in the method of selection, and in the classification. However, in this country a form of certificate similar to that now prescribed has been in use since 1927, and principles of selection based on the certifier's opinion rather than on arbitrary rules were introduced in 1940 concurrently with the adoption of the 1938 International List, so that the present obstacles to the comparability of statistics are almost limited to the effects of the changes in the classification.

In 1940, a statistical comparison to bridge the gap in continuity was provided by dual coding of all deaths in the years 1936 to 1939 according to both old and new principles. The Sixth Decennial Revision Conference in 1948 proposed a somewhat similar procedure on this occasion, recommending the dual coding of deaths in either 1949 or 1950 according to the detailed lists of both the 5th (1938) Revision and the 6th (1948) Revision, with publication of the tabulated data in such a way as to indicate the changes resulting from the application of the new list. To this end the mortality material for England and Wales for 1949 has been completely re-coded and tabulated according to the new (1948) detailed classification, and the results, which are reproduced in table 3 below, when compared with the statistics for the same year based on the old (1938) detailed list (already published in tables 21 and 22 of the Annual Review, Part I, for 1949) provide a useful basis for measuring the effects of the changes. A summary of the main effects of the revision on the principal groups of causes in the old list is given below in table 1.

From experience of the 1949 dual tabulations, supplemented by re-coding certain deaths in 1940–1948, it has been possible with the assistance of the World Health Organization Centre for Problems arising in the Application of the International Classification of Diseases, Injuries and Causes of Death to establish the derivation of the groups in the new list in terms of those in the old list, and to use this information for estimating numbers of deaths in each year 1940 to 1948 on the new basis from existing material. Figures estimated in this way will be found in table 7 of the Annual Review, Part I, for 1950 (the first year for which statistics have been based entirely on the new list).

Details of the derivation of groups in the new list are given in table 2 below, which also gives in column 5 an indication of the various methods employed in preparing estimates for the years 1940 to 1948 for the new groupings. This table was prepared by the World Health Organization Centre —and has been published by the World Health Organization.* A summary of these methods and the circumstances in which each was employed is given in the following paragraphs.

* Bulletin of the World Health Organization, Supplement 4—Comparability of Statistics of Causes of Death according to the Fifth and Sixth Revisions of the International List. Obtainable from H.M. Stationery Office, P.O. Box 569, London, S.E.1.

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Methods used in preparing estimates for 1940 to 1948 on the new basis

The definitions and contents of groups in both old and new lists were examined, together with the numbers of 1949 deaths assigned to them respectively, and on the basis of this evidence groups were classified so far as possible into the following types :—

(*a*) Where a new list group (A) closely corresponded to an old list group (X).

(*b*) Where a new list group (A) closely corresponded to a combination of old list groups (X, Y, etc.).

In situations of type (*a*) or (*b*), the deaths assigned on the old basis to (X) or to (X, Y, etc.) respectively in years 1940 to 1948 were assigned to (A) on the new basis for those years.

(*c*) Where a combination of new list groups (A, B, etc.) closely corresponded to a single old list group (X).

In this type of situation, the new list groups (A, B, etc.) were taken together (in tables for publication, by bracketing the causes together where convenient and by cross-reference through footnotes elsewhere) for 1940 to 1948, and the deaths for (X) were taken for the new groups thus combined.

(*d*) Where, by definition :—

$$\begin{cases} \text{A new list group (A)} = \text{part of an old list group (X).} \\ \text{A new list group (B)} = \text{remainder of old list group (X)} + \text{parts of other old list groups.} \end{cases}$$

Where this situation occurred, the ratio of (A) deaths to (X) deaths for the year 1949 was assumed to be similar in years 1940 to 1948, and was used to derive (A) from (X) in each year, the balance of (X) deaths being included in (B).

Where none of the above methods was applicable, use was made of one of the following possibilities :—

(*e*) Certain causes have been tabulated in past years in greater detail than was provided for by the old International List groups, by using special office sub-divisions of those groups. Where this was the case, and conditions (*a*) or (*c*) above applied to such sub-divisions, it was possible to apply to them the relative methods specified above.

(*f*) The details of individual deaths assigned to some old-list groups were entered on the machine cards. Where this was the case, and where the old list group was found on examination to have been distributed over several new-list groups, it was possible to recode the deaths for each year 1940 to 1948 according to the new list and distribute them accordingly. This was the only satisfactory method for uncommon but important diseases requiring exact annual figures, for diseases subject to considerable epidemic variation from year to year, and for groups of small numerical frequency.

(*g*) If none of the above methods, alone or in combination, sufficed for the complete disposal of deaths in an old-list group, it was possible for the machine cards for that group in the year of dual coding to be counted according to the new-list groups recorded on them, and for distribution factors to be calculated for application in years 1940 to 1948. Where this was done and where any block of deaths so distributed was very small and made no significant contribution to the appropriate receiving new-list group, that block of deaths was ignored and the other factors were adjusted accordingly.

(*h*) Some new list groups could only be constituted by using a combination of two or more of the above methods.

Table 1.—Some of the Principal Effects and Changes Resulting from the 1948 Revision of the International List

Section of the 1948 Classification	Principal effects and changes
001–138. Infective and Parasitic Diseases.	Aneurysm of aorta specified as non-syphilitic is now excluded from the Syphilitic group, and has been transferred to Diseases of the Circulatory System. Influenza has been transferred to Diseases of the Respiratory System, and Hodgkin's disease (Pernicious lymphogranulomatosis) to Neoplasms. Food poisoning, Sore throat when specified as streptococcal, and Infectious hepatitis are now separately distinguished within this section.
140–239. Neoplasms.	The Cancer group (140–205) now includes Hodgkin's disease, Leukæmia and aleukæmia, and Mycosis fungoides (formerly in code 43, Mycosis). Apart from these additions the new section is very similar to that in the old list in overall constitution. Certain categories now appear in finer detail than before. All neoplasms of lymph nodes or glands specified as primary are now separated from those unspecified or stated to be secondary.
240–289. Allergic, Endocrine System, Metabolic and Nutritional Diseases.	This section replaces the old "General" Diseases section. Rheumatic fever has been transferred to Diseases of the Circulatory System, except Acute or Sub-acute rheumatism so described, formerly grouped with Rheumatic fever, which is now shown under Diseases of the Bones and Organs of Movement. Chronic rheumatism, including Rheumatoid arthritis, is also now shown with Diseases of the Bones, etc. Asthma has been added to this section.
290–299 Diseases of the Blood and Blood-forming Organs.	Leukæmia and aleukæmia are now transferred to Neoplasms. A more detailed classification is provided for Anæmias. Subacute combined degeneration of spinal cord, formerly with Diseases of the Nervous System and Sense Organs, is now a sub-division of Pernicious and other hyperchromic anæmias.
300–326. Mental, Psycho-neurotic, and Personality Disorders.	This is a new section comprised of three old rubrics—Mental disorders and deficiency (old 84), Alcoholism (old 77), and Senility with mention of senile dementia (old 162B)—together with a few other small items. The classification is extended, mainly for morbidity purposes.
330–398. Diseases of the Nervous System and Sense Organs.	Mental disorders and deficiency now appear in the preceding section. Vascular lesions affecting the central nervous system now include Cerebral arteriosclerosis, previously with other arteriosclerosis among the Circulatory diseases, but no longer includes Hemiplegia specified as old or of long standing but of uncertain origin, now shown with Other cerebral paralysis (352). Convulsions in children under 5 years has been transferred to Symptoms, Senility and Ill-defined Conditions, and Chorea to Diseases of the Circulatory System.
400–468. Diseases of the Circulatory System.	A thorough re-classification within this section makes comparison of individual items difficult. Cerebral arteriosclerosis is now in the preceding section, and among items added to this section are :—Non-syphilitic aneurysm of aorta (formerly under code 30c, Aneurysm of aorta), Rheumatic fever (formerly code 58 among the General diseases) and Chorea (formerly code 87a among Diseases of the Nervous System and Sense Organs), Pulmonary embolism and infarction (formerly code 111a among Diseases of the Respiratory System), Acute œdema of lung (when specified as due to heart disease or failure) (formerly part of code 111b, Acute œdema of lung), and Arteriosclerosis of the kidney (previously classified with Nephritis).

Table 1.—(*contd.*)

Section of the 1938 Classification	Principal effects and changes
470–527. Diseases of the Respiratory System.	Pneumonia deaths under 4 weeks of age, or with onset in the first 4 weeks of life, are now classified separately among Diseases of Early Infancy in Pneumonia of the newborn. Bronchiectasis is no longer classified with Bronchitis, but constitutes a separate heading within this section. Influenza has been added, but Asthma, Pulmonary embolism and infarction, and Acute œdema of lung (specified as due to heart disease or failure) are excluded (*see* 400–468 Diseases of Circulatory System). This section now includes Diseases of the pharynx and tonsils.
530–587. Diseases of the Digestive System.	The title Enteritis and Diarrhœa does not appear in the new classification, and several of its constituents have received separate numbers. Deaths from Gastro-enteritis and colitis at ages under 4 weeks, and any condition specified as Diarrhœa of the newborn are now classified among Diseases of Early Infancy as Diarrhœa of the newborn. Diseases of the pharynx and tonsils, and Septic sore throat have been removed to Diseases of the Respiratory System and Infective, etc., diseases.
590–637. Diseases of the Genito-Urinary System.	Nephritis now excludes Arteriosclerosis of the kidney, and there has been a re-classification of its constituents. The section provides a much finer classification for Diseases of the male and female genital organs.
640–689. Deliveries, and Complications of Pregnancy, Childbirth, and the Puerperium.	The items within this section have been arranged in four separate and consecutive groups relating, respectively, to Pregnancy, Abortion, Delivery, and the Puerperium, and the classification is more detailed than in the old list. Puerperal toxæmias, where the condition was first noted before delivery, are now included separately in the Pregnancy group.
690–716. Diseases of the Skin and Cellular Tissue.	The residual heading within this section in the old list has now been replaced by a very full classification of the constituent items. Some of the conditions previously included, however, have been transferred to other sections, and the contents of the former residual heading should be carefully examined in conjunction with the index to the new classification. (These changes do not greatly affect the mortality picture, but may affect comparability of morbidity statistics).
720–749. Diseases of the Bones and Organs of Movement.	Chronic rheumatism is now included in this section, as are also Acute and Sub-acute rheumatism (previously classified with Rheumatic fever). An extensive classification takes the place of the broader headings in the old list.
750–759. Congenital Malformations.	This section now excludes Unqualified hydrocephalus, and Congenital abdominal hernia.
760–776. Certain Diseases of Early Infancy.	This section has been expanded by the inclusion of Pneumonia of newborn and Diarrhœa of newborn (*see* Diseases of the Respiratory System and Diseases of the Digestive System above). A feature of the new classification is the provision of fourth-digit codes to distinguish Associated immaturity with each item.
780–795. Symptoms, Senility, and Ill-defined Conditions.	This new section covers in greater detail the items from the Senility and the Ill-defined sections of the old list. Senility with mention of senile dementia has been transferred to Mental, etc., Disorders, and amongst several items now included are Convulsions in children under 5 years, and Uræmia (unqualified).

Table 1.—(*contd.*)

Section of the 1948 Classification	Principal effects and changes
E800–E999. Accidents, Poisonings, and Violence (External Cause of Injury).	Food poisoning has been transferred to Infective and Parasitic Diseases. Many items are now covered in greater detail. Accidents in mines and quarries, and Forestry accidents are no longer distinguished under separate headings but are now assigned according to the external cause of injury. A series of fourth-digit codes provides for details of place of occurrence of non-transport accidents, as well as for types of vehicles involved in transport accidents. Late effects of injury and poisoning are now distinguished under separate headings, and new headings are provided for Complications and misadventures due to medical and surgical procedures. The new codes for Accidental burns (E916, E917) no longer distinguish separately Conflagration, and they have been expanded by the inclusion of certain types of Explosions and Agricultural and Forestry accidents.

Table 2.—International List Categories, Sixth Revision, expressed in terms of groups of the Fifth Revision

C = comparability factor in 1949—method (d)
S = from special subdivisions in 1940–48—method (e)
R = by recoding individual deaths in 1940–48—method (f)
D = distribution factor in 1949—method (g)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
001	Respiratory tuberculosis with silicosis	13a					
002–007	Respiratory tuberculosis, including tuberculous pleurisy, without silicosis	13b, c					Includes hæmoptysis unspecified from 783.1.
008	Tuberculosis, site unspecified	13b, c					Excludes 003.1; see 519.
	Tuberculosis (of):						
010	meninges, nervous system	14					
011	intestines, peritoneum	15					
012.0	vertebral column	16					Includes 013.0.
012.1–012.3	hip, knee, other bones and joints	17					Includes 013.1–013.3.
	Tuberculosis, late effects—						
013.0	vertebral column						See 012.0.
013.1–013.3	hip, knee, other bones and joints						See 012.1–012.3.
014	Tuberculosis of skin	18					
015	Tuberculosis, lymphatic	19					
016	Tuberculosis, genito-urinary	20					
017	Tuberculosis, adrenals	21a					
018	Tuberculosis, other organs	21b					
019	Tuberculosis, acute miliary (excluding pulmonary) and disseminated	22	44d	R	·15	·11	Includes 138.0 (sarcoid of Boeck).
020.0	Interstitial keratitis		88	R	nil	nil	
020.1	Juvenile neurosyphilis						See 024, 025.
020.2	Other congenital syphilis	30da					
021	Early syphilis						See 023.
022	Aneurysm of aorta		30c	D	·74	·53	
023	Other cardiovascular syphilis	30db 30dc 30dd					Includes 021,026–029.
			30c	D	·04	·03	
			99	R	·05	·02	
024	Tabes dorsalis	30a					Includes part of 020.1.
025	General paralysis of insane	30b					Includes part of 020.1.
026–029	Other and undefined syphilis						See 023.
030–035	Gonorrhœa	25					
036–039	Other venereal diseases	44a					
040	Typhoid fever	1					
041	Paratyphoid fever	2					
042	Other Salmonella infections		177	S	·97	·97	Includes 049.
043	Cholera	4					
044	Brucellosis	5					
045	Dysentery, bacillary	27a					
046.0	Amœbiasis without liver abcess	27b					
046.1	Amœbiasis with liver abcess		125b	S, R, D	·02	·01	
047	Other protozoal dysentery	27c					
048	Dysentery, unspecified	27d					
049	Food poisoning (except Salmonella)						See 042.
050	Scarlet fever	8					Excludes deaths occurring 1 or more years after onset.
051	Streptococcal sore throat		105d		·04	·20	
			115b	D	·61	·73	
			115c	S, D	·03	·01	
052	Erysipelas	11					
053	Septicæmia	24a, b, d					
054	Bacterial toxæmia		26	R	nil	nil	
055	Diphtheria	10					
056	Whooping cough	9					
057	Meningococcal infection	6					
058	Plague	3					
059	Tularæmia		26	R	nil	nil	
060	Leprosy	23					

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
061	Tetanus	12					
062	Anthrax	7					
063	Gas gangrene	24c					
064	Other bacterial diseases		26	R	nil	nil	
070	Vincent's infection		32b	R	1·0	1·0	
071	Relapsing fever	31					
072	Weil's disease	32a					
073	Yaws		32b	R	nil	nil	
074.0	Rat-bite fever, spirochætal		32b	R	nil	nil	
074.1	Other spirochætal diseases		32b	R	nil	nil	
080–081	Acute poliomyelitis, including late effects	36					
082–083	Acute infectious encephalitis, including late effects	37					
			80b	D	·28	·14	
			81	D	·02	·01	
084	Smallpox	34					
085	Measles	35					
086	Rubella	38d					
087	Chickenpox	38e					
088	Herpes zoster	38c					
089	Mumps	44c					
090	Dengue		38f	R	*	nil	* 1 death.
091	Yellow fever	38a					
092	Infectious hepatitis		44d	R	·21	·33	
			125b	S, R, D	·51	·47	
			127b	S, R	·52	·41	
093	Glandular fever		44d	R	·24	·31	
094	Rabies	38b					
095	Trachoma		88	R	·005	·003	
096.0	Herpes febrilis						See 706–716.
096.1	Infectious keratoconjunctivitis		88	R	nil	nil	
096.2	Psittacosis		44d	R	·01	nil	
096.3	Cowpox		38f	R	nil	nil	
096.4	Epidemic hiccough		44d	R	nil	nil	
096.5	Epidemic myalgia		44d	R	·01	·02	
096.6	Foot-and-mouth disease		44d	R	nil	nil	
096.7	Sandfly fever		38f	R	nil	nil	
096.8	Rift-valley fever		38f	R	nil	nil	
096.9	Other virus infections		38f	R	nil	nil	
100	Typhus, louse-borne epidemic	39a					
101–108	Other typhus and rickettsioses	39b, c					
110–117	Malaria	28					
120	Leishmaniasis		29	R	·94	·67	Subgroups also.
121	Trypanosomiasis		29	R	·06	·33	Subgroups also.
122	Other protozoal infestation		29	R	nil	nil	Subgroups also
123	Schistosomiasis		42	R	·05	nil	Subgroups also
124	Other trematode diseases		42	R	nil	nil	
125	Hydatid disease	41					
126	Other cestode infestation		42	R	·42	·32	
127	Filariasis		42	R	·05	nil	
128	Trichiniasis		42	R	nil	·08	
129	Ankylostomiasis	40					
130	Infestation by other worms		42	R	·48	·60	Subgroups also.
131	Dermatophytosis		43	R	·01	·003	
132	Actinomycosis		43	R	·59	·53	
133	Coccidioidomycosis		43	R	nil	nil	
134	Other fungus diseases		43	R	·22	·24	Subgroups also.
135	Scabies						See 706–716.
136	Pediculosis		44d	R	nil	nil	
137	Other arthropod infestation		44d	R	nil	nil	
138.0	Sarcoid of Boeck						See 019.
138.1	Other infective and parasitic diseases		44d	R	nil	·02	
	Malignant neoplasms (of):						
140	lip	45a					
141	tongue	45b					
142.0	mixed, salivary gland		45c	S, R	·006	·006	
142.1	other, salivary glands		55d	S, R	·093	·079	
143, 144	mouth		45c	S, R, D	·35	·25	
145	oral mesopharynx		45c	S, R	·17	·12	
46	nasopharynx		45c	S, R	·03	·05	
47	hypopharynx		45c	S, R	·03	·02	
			47a	S, D	·03	·29	
148	pharynx, unspecified		45c	S, R	·22	·26	
150	œsophagus	46a					
151	stomach		46b	S	·994	·994	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
	Malignant neoplasms (*of*):—cont.						
152	small intestine		46b	S	·006	·006	
			46c	S	·015	·012	
153	other intestine except rectum		46c	S	·985	·988	
154	rectum	46d					
155, 156	liver, biliary passages ..	46e					
157	pancreas	46f					
158	peritoneum		46g	S, R	·97	·98	
159	unspecified digestive system	46h					
160	nose, middle ear, sinuses ..		55b	S, R, D	·15	·16	
			55d	S	·019	·016	
161	larynx		47a	S, D	·96	·70	
162–165	trachea, bronchus, lung,	47c					
	mediastinum		47a	S	·01	·01	
			47b	S, D	·985	·971	
170	breast	50					
171	cervix uteri	48a					
172	corpus uteri		48b	S		·116	
173	other uterus, specified ..		48b	S		·004	
174	uterus unspecified		48b	S		·880	Inquiries started from 1950.
175	ovary, tube, broad ligament		49	S, R		·82	
176	other and unspecified female genital organs		49	S, R		·18	
177	prostate	51b					
178	testis		51c	S	·53		
179	other male genital organs ..	51a					
			51c	S	·47		
180	kidney		52	S	·24	·35	
181	other urinary organs.. ..		52	S	·76	·65	
190, 191	skin	53					
			45c	S, D	·02	·03	
192	Eye		54a	S, R	·01	·01	
			55d	S, R	·053	·061	
193	brain and other central nervous system	54b, c	54a	S, R	·99	·99	
194	thyroid gland	55c					
195	adrenal	55a					
	other endocrine glands ..		55d	S, R	·018	·015	
196	jaw		45c	S, R, D	·17	·26	
	other bones		55b	S, R, D	·81	·76	
197	connective tissue						See 199.
198	secondary and unspecified lymph glands		46g	S, R	·03	·02	
			47b	S, D	·001	·004	
			55d	S, R	·187	·097	
199	other and unspecified sites ..		55b	S, D	·04	·08	Includes 197.
			55d	S, R	·342	·494	
200	Lymphosarcoma and reticulo-sarcoma		47b	S, D	·014	·025	Sites other than lymph gland, spleen, mediastinum are in 140–199.
			55d	S, R	·233	·174	
201	Hodgkin's disease	44b					
202	Other lymphoma		55d	S, R	·007	·006	
			56e	R	·002	·013	
			66b	S, R	·096	·071	
203	Multiple myeloma		55d	S, R	·048	·058	
204	Leukæmia, aleukæmia ..	74					
205	Mycosis fungoides		43	R	·16	·19	
	Benign neoplasms (*of*) :						
210	buccal cavity, pharynx ..		56e	R	·029	·024	
211	Other digestive system ..		56e	R	·14	·22	
212	respiratory system		56e	R	·068	·084	
213	breast		56e	R	·001	·014	
214	uterine fibromyoma ..		56b	S		·91	
215	Other uterine		56b	S		·09	
216	ovary	56a					
217	other female genitals ..	56c					
218	male genital organs		56e	R	·007		
219	Kidney, urinary organs ..		56e	R	·54	·29	
220	melanoma of skin		56e	R	nil	nil	
221	pilonidal cyst		56e	R	·001	·001	
222	other skin :		56e	R	·004	·012	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
	Benign neoplasms (of):—cont.						
223	brain, nervous system ..	56d					
			56e	R	·003	·005	
224	endocrine glands		56e	R	·08	·16	
225	bone, cartilage		56e	R	·032	·042	
226	lipoma		56e	R	·004	·018	
227	other connective tissues ..		56e	R	·004	·015	
228	hæmangioma		56e	R	·016	·037	
			157ie	R	·024	·022	
229	other and unspecified organs		56e	R	·033	·030	
	Neoplasms, unspecified (of):						
230	digestive system		57e	R	·25	·44	
231	respiratory system		57e	R	·48	·20	
232	breast		57e	R	nil	·005	
233	uterus	57b					
234	ovary	57a					
235	other female genitals ..	57c					
236	other genito-urinary ..		57e	R	·10	·08	
237	brain, nervous system ..	57d					
238	skin, musculo-skeletal ..		57e	R	·07	·085	
239	other and unspecified ..		57e	R	·10	·19	
240	Hay fever	112					
241	Asthma						
242	Angioneurotic œdema						Included in 517, 716.
243	Urticaria						In 716.
244	Allergic eczema						In 716.
245	Other allergic disorders ..						Nil in 1940–8.
250	Simple goitre						
251	Non-toxic nodular goitre ..		63a	D	·93	·81	
252	Toxic goitre	63b					
			63a	D	nil	·12	
253	Myxœdema, cretinism	63c					
254	Other disease of thyroid ..	63d					
			63a	D	·07	·07	
260	Diabetes mellitus	61					Includes 270, 789.6.
270	Disorders of pancreatic internal secretion						See 260.
271	Diseases of parathyroid ..	63e					
272	Diseases of pituitary	62					
			66b	S, R	·018	·026	
273	Diseases of thymus	64					
274	Diseases of adrenals	65					
			160c	D	·021	·029	
275	Ovarian dysfunction						See 625
276	Testicular dysfunction ..						See 617
277	Other diseases of endocrine glands		66b	S, R	·015	·036	
280	Beri-beri	68					
281	Pellagra	69					
282	Scurvy	67					
283	Acute rickets	70					
284	Late effects of rickets						
285	Osteomalacia	66a					Includes osteoporosis from 733.
286.0	Steatorrhœa		66b	S (66b2)	·282	·259	
286.1–286.4, 286.6	Other vitamin and multiple deficiency	71					
286.5	Malnutrition, unspecified ..		200a	S, R	·006	·010	
287	Obesity		66b	S, R	·073	·191	
288	Gout	60					
289.0	Lipidosis		66b	S, R	·028	·025	
289.1	Amyloidosis		66b	S, R	·016	·014	
			125b	S, R	·005	·004	
			133b	S, R	·03	·02	
289.2	Other metabolic disorders ..		66b	S, R	·105	·075	
290.0	Pernicious anæmia						
290.1	Subacute combined degeneration of spinal cord	73a	82	S (82 : 2)	·041*	·074*	* 1949. See 82.2 in Table 6 for 1940–48.
290.2	Other hyperchromic anæmia ..		73b	D	1·00	·70	
291	Iron deficiency anæmia ..	73c					
292.0	Familial acholuric jaundice ..		73d	R	·03	·02	
292.1	Acute hæmolytic anæmia ..		73d	R	·03	·02	
292.2	Other hæmolytic anæmia ..		73d	R	·08	·08	
292.3	Leuko-erythroblastic anæmia		73d	R	·04	·02	
292.4	Aplastic anæmia		73d	R	·55	·49	
292.5	Non-regenerative anæmia ..		73d	R	·005	·006	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
292.6	Sickle-cell anæmia		73d	R	·001	nil	
292.7	Other specified anæmia ..		73d	R	·03	·02	
293	Anæmia unspecified		73b	D	nil	·30	
			73d	R	·23	·33	
294	Polycythæmia	76b					
295	Hæmophilia	72b					
296	Purpura and other hæmorrhagic conditions	72a 72c					
297	Agranulocytosis	76a					
298.0	Hepatolienal fibrosis	75a 75b					
298.1	Other diseases of spleen ..		75c	R	·40	·27	
299	Other diseases of blood and blood-forming organs ..	76c 76d					
300	Schizophrenia	84b					
301	Manic-depressive psychosis ..						See 309.
302	Involutional melancholia ..						See 309.
303	Paranoia						See 309.
304	Senile psychosis	162b					
305	Presenile psychosis						
307	Alcoholic psychosis		77	R	·12	·14	
309	Other and unspecified psychosis	84c 84d					Includes 301–303, 310–321.
			66b	S, R	·026	·015	
310–318	Psychoneurosis						See 309.
320	Pathological personality ..						See 309.
321	Immature personality						See 309.
322	Alcoholism		77	R	·88	·86	
323	Other drug addiction	79b					
			79c	R	·33	·75	
324	Primary childhood behaviour disorders						Nil 1940–49.
325	Mental deficiency	84a					
326	Other and unspecified character, etc., disorders						Nil in 1949.
330	Subarachnoid hæmorrhage ..		83a	C	·985	·983	Rest to 333–334.
331	Cerebral hæmorrhage						
332	Cerebral embolism and thrombosis	83b, c					Includes 341.
333	Spasm of cerebral arteries ..	83e					See 330–331.
			83a	C (rest)	·015	·017	
			83d	D	·478	·373	
334	Other and ill-defined vascular lesions affecting central nervous system		93c	S, D	·0009	·0010	
			97	D	·114	·120	
			99	S, R	·004	·007	
			102	D	·014	·014	
340	Meningitis (except meningococcal and tuberculous)		81	D	·966	·955	See 480–483.
341	Phlebitis of intracranial sinuses						See 332.
342	Intracranial and intraspinal abscess	80a					
343	Encephalitis, myelitis, and encephalomyelitis		80b	D	·72	·86	
			81	D	·017	·039	
			82	S (82 : 3)	·114*	·126*	* 1949. See 82.3 in Table 6 for 1940–48
344	Late effects of intracranial abcess, etc.		157a	D	·146	·126	
345	Multiple sclerosis	87d					
350	Paralysis agitans	87c					
			97	D	·002	·001	
351	Cerebral spastic infantile paraplegia		82	S, C	·051*	·046*	* 1949. In 1940–48 two-fifths of deaths in 82 : 4. See 357.
			87e	S, D	·295	·197	
			157ia	D	·038	·047	
352	Other cerebral paralysis ..		83d	D	·366	·452	
			87e	S, D	·077	·065	
353	Epilepsy	85					
354	Migraine		87e	S, D	·628	·738	
355	Other diseases of brain		162c	D	·005	·005	
356	Motor neurone disease and muscular atrophy		82	S (82 : 1)	·717*	·685*	* 1949. See 82 : 1 in Table 6 for 1940–48.
357	Other diseases of spinal cord ..		82	S, C	·077*	·069*	* 1949. In 1940–48 three-fifths of deaths in 82 : 4.

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
360–364, 366–369	Neuritis and diseases of peripheral nerves	87b	44d	R	·38	·21	
365	Erythrœdema polyneuritis		66b	S (66b1)	·28	·23	
370	Conjunctivitis		88	R	·04	·04	
371	Blepharitis		88	R	·02	·01	
372	Hordeolum		88	R	·03	·03	
373–376	Inflammatory diseases of uveal tract		88	R	·12	·08	
377	Inflammation of optic nerve, retina		88	R	·02	nil	
378	Inflammation of lachrymal glands and ducts		88	R	·04	·03	
379	Other inflammatory diseases of eye		88	R	·36	·21	
380	Refractive errors		88	R	nil	nil	
381	Corneal ulcer		88	R	·014	·024	
382	Corneal opacity		88	R	nil	nil	
383	Pterygium		88	R	nil	nil	
384	Strabismus		88	R	·04	·03	
385	Cataract		88	R	·15	·24	
386	Detached retina		88	R	·01	·003	
387	Glaucoma		88	R	·11	·24	
388	Other diseases of eye		88	R	·07	·05	
389	Blindness		88	R	·005	·02	
390	Otitis externe	89a					See 390–391.
391	Otitis media without mastoiditis		56e	R	·004	·005	Includes 394–398.
392	Otitis media with mastoiditis	89b					See 390–391.
393	Mastoiditis without mention of otitis						See 390–391.
393							
394–396	Other ear and mastoid diseases						
397	Deaf mutism						
398	Deafness						
400	Rheumatic fever without mention of heart involvement		58d	D	·64	·50	
401.0	Active rheumatic pericarditis	58a	90a	D	·75	·57	
			90b	D	·22	·15	
401.1	Active rheumatic endocarditis		58b	D	·482	·466	
			92b	S, D	·008	·007	
401.2	Active rheumatic myocarditis	58c	93b	D	·017	·026	
401.3	Active rheumatic fever with other and unspecified heart disease		58b	D	·422	·477	
			58d	D	·11	·15	
			92b	S, D	·028	·024	
			93b	D	·034	·045	
402	Chorea	87a					
410	Diseases of mitral valve		92b	S, D	·771	·824	
411	Diseases of aortic valve specified as rheumatic		92a	D	·014	·006	
			92b	S, D	·052	·019	
412	Diseases of tricuspid valve						
413	Diseases of pulmonary valve specified as rheumatic		58b	D	·096	·057	* Routine inquiries since 1950 concerning unspecified endocarditis modify these.
			92b	S, D	·116*	·106*	
414	Other endocarditis specified as rheumatic		92c	D	·006*	·005*	
415	Other myocarditis specified as rheumatic		92b	S, D	·001	·001	
			93b	D	·90	·90	
			93c	S, D	·0001	·0002	
416	Other heart disease specified as rheumatic	95b	90a	D	·25	·43	
			90b	D	·25	·15	
			92b	S, D	·021	·016	
			93b	D	·045	·030	
420	Arteriosclerotic heart disease including coronary disease	94a, b	93c	S, D	·054	·034	
			93d	D	·077	·053	
			95c	D	·017	·016	
			131b	D	·018	·013	
421.1	Chronic endocarditis of aortic valve		92a	D	·977	·992	
421.0	Chronic endocarditis of other and unspecified valves		92b	S, D	·003	·003	See note to 412–414.
421.2–421.4			92c	D	·988	·993	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
422.0	Fatty degeneration of heart ..		93c	S, D	·006	·009	
422.1	Other myocardial degeneration with arteriosclerosis		93c	S, D	·321	·301	
			131b	D	·039	·037	
422.2	Other myocardial degeneration		93c	S, D	·547	·588	
			93d	D	·923	·947	
			95c	D	·053	·047	
			131b	D	·038	·034	
			132	D	·034	·033	
			162c	D	·003	·002	
430	Acute and subacute endocarditis	91	92c	D	·006	·002	
431	Acute myocarditis not specified as rheumatic	93a	93c	S, D	·0001	·0003	
432	Acute pericarditis specified as non-rheumatic		90b	D	·101	·217	
433	Functional disease of heart ..		93c	S, D	·003	·002	
			95a	D	·971	·981	
			95c	D	·018	·022	
434	Other and unspecified diseases of heart		90b	D	·426	·481	
			93c	S, D	·001	·001	
			95a	D	·012	·014	
			95c	D	·870	·874	
			111b	D	·633	·652	
			162c	D	·003	·002	
440, 441, 443	Hypertension with heart disease but without nephrosclerosis..		93c	S, D	·065	·062	
			95a	D	·017	·005	
			95c	D	·042	·041	
			97	D	·035	·029	
			102	D	·346	·311	
			131b	D	·027	·024	
442	Hypertensive heart disease with arteriolar nephrosclerosis ..		93c	S, D	·0003	·0002	
			131b	D	·085	·094	
444, 445, 447	Hypertensive disease without mention of heart and kidney involvement		83d	D	·096	·110	
			93c	S, D	·0004	·0004	
			97	D	·101	·104	
			102	D	·638	·675	
			131b	D	·173	·144	
446	Hypertension with arteriolar nephrosclerosis but without mention of heart		131b	D	·198	·200	
450	General arteriosclerosis ..		83d	D	·060	·065	
			92a	D	·009	·002	
			93c	S, D	·002	·001	
			97	D	·747	·745	
			99	S, R	·157	·159	
			131b	D	·111	·091	
451	Aortic aneurysm, non-syphilitic	96	30c	D	·214	·438	
452	Other aneurysm except of heart and aorta	96	99	S, R	·064	·075	
		96	102	D	·002	·0003	
453.0	Raynaud's disease	96	99	S	·037	·083	
453.1–453.3	Other forms of peripheral vascular disease		99	S, D, R	·196	·065	
454	Arterial embolism and thrombosis		99	S. D. R	·092	·149	
455	Gangrene of unspecified cause	98					
456	Other diseases of arteries ..		99	S, R	·098	·109	
			153	S, D	·04	·12	
460–462	Varicose veins and hæmorrhoids	100a					
465	Pulmonary embolism and infarction	111a					
463, 464, 466	Phlebitis, other venous embolism and thrombosis	100b	99	S, D	·077	·114	
467	Other diseases of circulatory system..	103					
468	Certain diseases of lymph nodes and lymph channels ..	101	153	S, D	nil	·02	Includes 694, 782.7.

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
470	Acute nasopharyngitis		104	D	·07	·09	
			115c	S, D	·03	·01	
471	Acute sinusitis		104	D	·12	·06	
472	Acute pharyngitis		115c	S, D	·11	·12	
473	Acute tonsillitis		115b	D	·31	·17	
			115c	S, D	·34	·26	
474	Acute laryngitis and tracheitis..						See 500.
475	Acute upper respiratory infection, ill-defined		104	D	·12	·15	
480–483	Influenza	33					Includes 340·0 (Meningitis—H. Influenzæ).
490	Lobar pneumonia	108*					* Ages 4 weeks and over.
491	Bronchopneumonia	107*					
492	Primary atypical pneumonia ..	109*					
493	Other and unspecified pneumonia						
500	Acute bronchitis		105	D	·57	·50	Includes 474.
			106a	C	·981	·993	Rest to 501–2.
501, 502	Bronchitis unqualified and chronic	106c					
			106a	C (rest)	·019	·007	See 500.
			106b	C (rest)	·915	·924..	See 526.
			113	C (rest)	·416	·381	See 527.1.
510	Hypertrophy of tonsils.. ..		115b	D	·08	·10	
			115c	S, D	·21	·23	
511	Peritonsillar abscess		115c	S, D	·12	·17	
512, 513	Chronic pharyngitis and sinusitis		104	D	·69	·70	
514	Deflected nasal septum ..						
515	Nasal polyp		56e	R	·02	·04	
516	Chronic laryngitis						
517	Other diseases of upper respiratory tract		105	D	·39	·30	
			115c	S, D	·10	·16	
518	Empyema	110a					
519	Pleurisy	110b					Includes 003.1.
520	Spontaneous pneumothorax ..		114e	S, R	·031	·033	
521	Abcess of lung	114c, d					
522	Pulmonary congestion and hypostasis	111c					
			132	D	·038	·011	
			162c	D	·001	·001	
523, 524	Pneumoconiosis and occupational pulmonary fibrosis ..	114a 114b					
			114e	S, D	·027	·012	
525	Other chronic interstitial pneumonia		114e	S, D	·880	·858	
526	Bronchiectasis		106b	C	·085	·076	Rest to 501–2.
527.0	Pulmonary collapse (age one year and over)		114e	S, R	·015	·032	
527.1	Emphysema without mention of bronchitis		113	C	·584	·619	Rest to 501–2.
527.2	Other diseases of lung ..		111b	D	·367	·348	
			114e	S, R	·027	·036	
530–535	Diseases of teeth and supporting structures		115a	D	·86	·48	
			200a	S, R	·005	·007	
536–538	Other diseases of mouth and salivary glands	115d					
			43	R	·01	·03	
			115a	D	·14	·52	
539	Diseases of œsophagus ..	116					
540	Ulcer of stomach	117a					Includes 542.
541	Ulcer of duodenum	117b					
542	Gastrojejunal ulcer						See 540.
543	Gastritis and duodenitis ..		118	S	·694	·799	
544	Functional disorders of stomach		118	S	·216	·133	
545	Other diseases of stomach and duodenum		123b	D	·094	·009	Includes 784.1–784.3.
550–552	Appendicitis	121					
553	Other diseases of appendix ..						
560	Hernia without mention of intestinal obstruction ..		122a	D	·177	·100	
			157ic	D	·133	·122	
561	Hernia with intestinal obstruction		122a	D	·823	·900	
			157ic	D	·053	·019	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
570.0	Intussusception		122b	S (b1)	·135*	·077*	* 1949. See 122b1 in Table 6 for 1940–48
			157ic	D	·050	·052	
570.1	Paralytic ileus		122b	S, D	·033	·025	
570.2	Mesenteric infarction		97	D	·0005	·0001	
			99	S, D, R	·225	·214	
			122b	S, D	·004	·003	
			123b	D	·021	·017	
570.3	Volvulus		122b	S, D	·269	·241	
			123b	D	·031	·009	
			157ic	D	·030	·041	
570.4	Impaction of intestine		122b	S, D	·002	·005	
			123b	D	·094	·145	
			126	D	·028	·052	
570.5	Other intestinal obstruction		122b	S, D	·547	·628	
			123b	D	·031	·026	
			157ic	D	·015	·026	
571	Gastro-enteritis at ages four weeks and over		119a	D	·909	·918	Includes 785.6.
			120a	D	·860	·872	
			120b	D	·037	·043	
572.0	Regional enteritis		120a	D	·092	·064	
			120b	D	nil	·007	
572.1	Diverticulitis		123a	D	·940	·959	
572.2	Ulcerative colitis	119b					
572.3	Other chronic enteritis		119a	D	nil	·002	
573	Functional disorders of intestines		120a	D	·048	·064	
			120b	D	·863	·892	
			123b	D	nil	·035	
574	Anal fissure and fistula		123b	D	·292	·129	
575	Anal and rectal abscess						
576, 577	Peritonitis and peritoneal adhesions		122b	S, D	·01	·02	
			129	D	·88	·92	
578	Other diseases of intestines and peritoneum		120b	D	·10	·06	Includes 785.4, 785.5, 785.7–.9.
			123a	D	·03	·04	
			123b	D	·44	·60	
			125b	S, R	·01	·01	
			129	D	·12	·08	
			157ic	D	·02	·03	
580	Acute and subacute yellow atrophy of liver	125a	125b	S, D	·07	·14	
581	Cirrhosis of liver	124a, b	125b	S, D, R	·05	·05	
582	Suppurative hepatitis, liver abcess		125b	S, D, R	·13	·07	
583	Other diseases of liver		125b	S, D, R	·08	·11	
584	Cholelithiasis		126	D	·972	·948	
585	Cholecystitis without mention of calculus	127a	127b	R	·067	·031	
586	Other diseases of gallbladder and ducts		127b	R	·412	·561	
587	Diseases of pancreas	128					
590	Acute nephritis		130	D	·650	·661	
			131a	D	·036	·013	
591	Nephritis with œdema		130	D	·307	·307	
			131a	D	·112	·152	
			133b	S, R	·171	·151	
592	Chronic nephritis		131a	D	·822	·795	
			131b	D	·290	·346	
			131c	D	·996	·996	
			132	D	·052	·037	
593	Nephritis, unspecified		130	D	·043	·032	Includes 789.0.
			131a	D	·030	·040	
			131b	D	·011	·010	
			131c	D	·004	·004	
			132	D	·508	·582	
594	Other renal sclerosis		131b	D	·010	·007	
			132	D	·010	·004	
600	Infections of kidney	133a					
601	Hydronephrosis		133b	S	·589	·638	
602	Calculi of kidney and ureter	134a					
603	Other diseases of kidney and ureter		133b	S, R	·092	·132	
604	Other urinary calculi	134b, c					

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
605	Cystitis	135a					
606	Other diseases of bladder		123a	D	·032	·003	
			135b	R	·606	·471	
607	Urethritis, non-venereal						See 609.
608	Stricture of urethra	136a					
609	Other diseases of urethra	136b					Includes 607.
610	Hyperplasia of prostate	137a					Includes prostatectomy unqualified in 612.
			56e	R	·007		
611	Prostatitis	137b					
612	Other diseases of prostate						
613	Hydrocele		138	S	·14		
614	Orchitis and epididymitis		138	S, R	·29		
615	Redundant prepuce, phimosis		138	S	·47		
616	Sterility, male		138	S, R	nil		
617	Other diseases of male genital organs		138	S, R	10		Includes 276.
620, 621	Diseases of breast	139c					
622–624	Salpingitis and oophoritis		139a	S, R		·784	
625	Other diseases of ovaries and Fallopian tubes		139a	S, R		·058	Includes 275.
626	Diseases of parametrium		139a	S		·158	
630	Infective disease of uterus, vagina, and vulva		139b	S, R		·107	
			139d	R		·322	
631	Uterovaginal prolapse		123b	D		·035	
			135b	R		·196	
			139b	S, R		·501	
			139d	R		·220	
632	Malposition of uterus		139b	S, R		·027	
633	Other diseases of uterus		139b	S, R		·217	
634	Disorders of menstruation		139b	S, R		·100	
635	Menopausal symptoms		139b	S, R		·049	
636	Sterility, female		139d	R		·034	
637	Other female genital diseases		139d	R		·424	
640	Pyelitis of pregnancy		145	R		·14	
641	Other infections of genito-urinary tract in pregnancy		145	R		·03	
642.0, 642.1	Hypertensive and renal disease of pregnancy	144a, 144b					
642.2	Pre-eclampsia of pregnancy		148a	R		·69	
642.3	Eclampsia of pregnancy		148b	R		·80	
			148d	R		·11	
642.4	Hypermesis gravidarum	144c					
642.5	Other toxæmias of pregnancy	144d					
			148b	R		·07	
			148c	R		·67	
			148d	R		·87	
643	Placenta prævia	143a					
644	Other hæmorrhage of pregnancy	143b, c					
645	Ectopic pregnancy	142					
646	Anæmia of pregnancy		73d	R		·01	
			145	R		·01	
647	Pregnancy with malposition of fœtus		145	R		·09	
648	Other complications arising from pregnancy		145	R		·67	
			149	R		·013	
650	Abortion without mention of sepsis or toxæmia		141	R		·69	
			145	R		·01	
651	Abortion with sepsis	140					
652	Abortion with toxæmia but without sepsis		141	R		·31	
			145	R		·05	
660	Normal delivery		150c	R		·94	
670	Delivery with placenta prævia	146a, b					
671, 672	Delivery with retained placenta and other postpartum hæmorrhage	146c, 146d					Includes 688.0.
			149	R		·16	
673	Delivery with abnormal pelvis		149	R		·09	
674	Delivery with disproportionate fœtus		149	R		·20	
675	Delivery with prolonged labour		149	R		·21	
676	Delivery with laceration of perineum		149	R		·02	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
677	Delivery with other trauma ..		149	R		·11	
678	Delivery with other complications		149	R		·20	
			150c	R		·06	
680	Puerperal urinary infection without other sepsis	147a					
681	Sepsis of childbirth and puerperium	147b					Includes 683
682	Puerperal phlebitis and thrombosis	147c					See 681.
683	Pyrexia in puerperium ..						Includes 688.2.
684	Puerperal pulmonary embolism	147d					
685	Puerperal eclampsia		148a	R		·31	
			148b	R		·13	
686	Other puerperal toxæmia ..		148c	R		·33	
			148d	R		·02	
687	Cerebral hæmorrhage in puerperium						See 688.3.
688.0	Anæmia of puerperium ..						See 671–672.
688.1	Puerperal psychosis	150b					
688.2	Sudden death of unknown cause in peurperium						See 684.
688.3	Other and unspecified complications of puerperium		149	R		nil	Includes 687.
689	Mastitis and disorders of lactation	150a					
690	Boil and carbuncle	151					
691–693	Cellulitis	152					
			115c	S, D	·06	·04	
694	Acute lymphadenitis ..						See 468.
695	Impetigo		153	S	·06	·05	
696	Infectious warts		38f	R	nil	nil	
697	Molluscum contagiosum ..		38f	R	nil	nil	
698	Other local infections of skin ..		153	S, D	·04	·02	
700–703	Dermatitis and eczema ..		79a, c	R	·06	nil	
			153	S, D	·38	·25	
704	Pemphigus		153	S, D	·28	·24	
705	Erythematous conditions ..		153	S, D	·07	·09	
706–716	Other diseases of skin and subcutaneous tissues.. ..		153	S, D	·13	·21	Includes 096.0 and 135.
			156b	S, R	·038	·086	
			162c	D	·002	·003	
720	Acute pyogenic arthritis ..		156a	S, R	·866	·876	
721	Acute nonpyogenic arthritis ..		156a	S, R	nil	·003	
722.0	Rheumatoid arthritis ..		59a	S, R	·990	·998	
			59b	S, R	·033	·042	
722.1	Spondylitis ankylopoietica ..		59a	S, R	·004	·001	
			59b	S, R	·017	·002	
722.2	Chronic rheumatic nodular fibrositis		59a	S, R	nil	nil	
723.0	Osteoarthritis		59a	S, R	·006	·001	
			59b	S, R	·825	·866	
723.1	Spondylitis osteoarthritica ..		59b	S, R	·068	·023	
723.2	Adult osteochondrosis of spine..		59b	S, R	·001	nil	
724	Other specified arthritis ..		59b	S, R	·004	·013	
			156a	S, R	·013	·015	
725	Arthritis unspecified		59b	S, R	·053	·053	
726.0	Lumbago		59c	R	nil	nil	
			156b	S, R	·011	·004	
726.1	Humero-scapular myofibrosis ..		59c	R	·006	nil	
726.2	Torticollis		156b	S, R	·006	·004	
726.3	Other muscular rheumatism		59c	R	·100	·076	
			156b	S, R	·011	·011	
727	Rheumatism unspecified ..		58d	D	·250	·350	
			59c	R	·894	·924	
730	Osteomyelitis and periostitis ..	154					
731	Osteitis deformans	155					Osteoporosis excluded ; see 285.
732	Osteochondrosis..						
733	Other diseases of bone ..						
734	Internal derangement of knee..		156a	S, R	nil	·005	
735	Displacement of intervertebral disc		156a	S, R	·034	·018	
736	Affections of sacro-iliac joint ..		156a	S, R	nil	nil	
737	Ankylosis of joint		156a	S, R	·026	·010	
738	Other diseases of joints ..		156a	S, R	·038	·049	
740	Bunion		156b	S, R	·005	·027	
741, 742	Synovitis, bursitis, and tenosynovitis		156a	S, R	·011	·008	
			156b	S, R	·060	·106	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
743	Infective myositis, other inflammatory disease		156b	S, R	·012	·005	
744.0	Myasthenia gravis		156b	S, R	·214	·392	
744.1	Inborn defect of muscle ..		156b	S, R	·284	·070	
			157ie	R	·093	·090	
744.2	Other diseases of muscle, tendon, and fascia		156b	S, R	·109	·067	
745	Curvature of spine		156b	S, R	·288	·191	
			157ie	R	·018	026	
746	Flat foot		156b	S, R	nil	nil	
747	Hallux valgus and varus ..		156b	S, R	·003	·018	
748	Club foot		156b	S, R	·002	·005	
			157ie	R	·040	·026	
749	Other deformities		156b	S, R	·009	·007	
750	Monstrosity	157d					
751	Spina bifida and meningocele ..	157b					
			157ia	D	·170	·156	
752	Congenital hydrocephalus ..		157a	D	·854	·874	
753	Other congenital malformations of nervous system and sense organs		157ia	D	·792	·797	
754·0–754.4	Congenital malformation of heart		157c	C	·963	·975	Rest to 754.5–754.6.
754.5	Coarctation of aorta	157ib					
754.6	Other malformations of circulatory system	157ib	157c	C (rest)	·037	·025	See above.
755	Cleft palate and harelip ..	157f					
756.0	Congenital hypertrophic pyloric stenosis	157e					
756.1	Imperforate anus	157g					
756.2	Other congenital malformations of digestive system		125b	S, R	·002	·003	
			157ic	D	·664	·695	
			157id	D	·011	·103	
			157ie	R	·031	·039	
757.0	Undescended testicle						See 757.2.
757.1	Polycystic disease of kidney ..	157h					
757.2	Congenital malformations of external genital organs ..		157id	D	·057	·051	Includes 757·0.
757.3	Other congenital malformations of genito-urinary system ..		157id	D	·932	·846	
758	Congenital malformations of bone and joint		156a	S, R	·011	·015	
			157ie	R	·192	·248	
759	Other and unspecified congenital malformations	157j					
			114e	S, R	·018	·017	
			157ic	D	·035	·019	
			157ie	R	·602	·549	
760	Intracranial and spinal injury at birth	160, a b					
761	Other birth injury		159	D	·005	·004	
			160c	D	·921	·901	
762	Postnatal asphyxia	161a					
			159	D	·004	·004	
763	Pneumonia of newborn ..	107–109*	161b	D	·049	·020	* Ages under 4 weeks.
			159	D	·027	·024	
			160c	D	·058	·070	
764	Diarrhœa of newborn		119a	D	·089	·079	
			159	D	·003	·004	
765	Ophthalmia neonatorum ..						See 768.
766	Pemphigus neonatorum ..		161c	S (c2)	·383	·417	
767	Umbilical sepsis..		161c	S (c1)	·271	·317	
768	Other sepsis of newborn ..		159	D	·001	·0004	Includes 765.
			161c	S (c3)	·346	·266	
769	Neonatal disorders from maternal toxæmia		159	D	·007	·010	
			161b	D	·902	·921	
770	Hæmolytic disease of newborn		159	D	·004	·004	
			161e	S, D	·903	·924	
771	Hæmorrhagic disease of newborn	161d					
			159	D	·002	·002	
772	Nutritional maladjustment ..		119a	D	·002	·001	
			158	D	·068	·047	
			159	D	·001	·004	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
773	Ill-defined diseases peculiar to early infancy		158	D	·932	·953	
			159	D	·057	·049	
			161e	S	·084	·067	
774	Immaturity with subsidiary cause		159	D	·889	·894	
776	Immaturity unqualified		161b	D	·049	·059	
780.0	Coma, stupor		200a	S, R	·0004	·001	
780.1	Delirium		200a	S, R	nil	nil	
780.2	Convulsions	86					
780.3	Jacksonian epilepsy						
780.4	Abnormal involuntary movement		87e	S	·02	·02	Includes 788.5.
780.5–781.9	Certain other nervous symptoms		200a	S, R	nil	nil	
782.0–782.3	Certain circulatory disturbances		95a	R	nil	nil	
			200a	S, R	nil	nil	
782.4	Acute heart failure	199					Includes 795.2.
			200a	S (a1)	·80*	·80*	* In 1948–49.
782.5	Syncope		200a	S, R	nil	nil	
782.6	Oedema, dropsy		200a	S, R	·005	·009	
782.7	Enlarged lymph nodes						See 468.
782.8	Splenomegaly		75c	R	·60	·73	
782.9	Shock		200a	S, R	nil	nil	
783.0	Epistaxis		200a	S, R	nil	nil	
783.1	Hæmoptysis		114e	S, R	·002*	·012*	* Specified as non-tuberculous.
783.2–783.7	Certain other respiratory symptoms		200a	S, R	nil	nil	
784.0	Anorexia		200a	S, R	·0004	·001	
784.1–784.3	Vomiting, pylorospasm, heart burn						See 544,545.
784.4	Dysphagia		200a	S, R	nil	nil	
784.5	Hæmatemesis		118	S	·068	·157	
784·6–785.0	Other classified symptoms, upper digestive tract		200a	S, R	nil	nil	
785.1	Hepatomegaly		125b	S, R	·016	·021	
785.2	Jaundice		125b	S, R	·105	·121	
			161e	S, D	·013	·009	
785.3	Ascites		200a	S, R	·003	·006	
785.4	Flatulence						See 578.
785.5	Abdominal pain						See 578.
785.6	Diarrhœa, ages 2 years and over						See 571.
785.7–785.9	Other classified symptoms, lower digestive tract						See 578.
768.0	Pain, urinary system		200a	S, R	nil	nil	
786.1	Retention of urine		135b	R	·31	·13	
786.2	Incontinence of urine		135b	R	·07	·18	
786.3	Frequency of micturition		135b	R	nil	nil	
786.4	Polyuria		66b	S, R	nil	nil	
786.5	Oliguria, anuria		133b	S, R	·061	·025	
786.6	Priapism				nil	nil	
786.7	Pain, genital organs				nil	nil	
787.0–787.7	Certain symptoms of locomotor system		156a	R	nil	nil	
			200a	S, R	nil	nil	
788.0–788.4	Certain general symptoms		200a	S, R	nil	nil	
788.5	Tetany						See 780.2–780.4.
788.6	Acidosis		66b	S, R	·031	·016	
788.7	Alkalosis		66b	S, R	·004	·001	
788.8	Pyrexia		200a	S, R	·007	·006	
788.9	Other specified symptoms		200a	S, R	nil	·002	
789.0	Albuminuria						See 593.
789.1							
789.2	Pyuria, bacteriuria		133b	S, R	·004	·004	
			135b	R	·006	·021	
789.3	Chyluria		42	R	nil	nil	
789.4	Hæmaturia		133b	S, R	·050	026	
789.5	Hæmoglobinuria		133b	S, R	·002	·006	
789.6	Glycosuria						See 260.
789.7	Acetonuria		66b	S, R	nil	nil	
790	Nervousness and debility		200a	S, R	·010	·008	
791	Headache		200a	S, R	nil	nil	
792	Uraemia unqualified		132	D	·203	·126	

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
794	Senility without psychosis ..	162a					
			132	D	·155	·207	
			162c	D	·987	·987	
			200a	S, R	·045	·060	
795	Ill-defined and unknown causes	200b, c					See 782.4.
			66b	S, R	·029	·042	
			156b	S, R	·018	·007	
			200a	S, R	·121	·096	
E800–802	Railway accidents		169	S	·968	·952	Excluding electrocution. See E914.
			174	S, R	·0013	nil	
E810–835	Motor vehicle accidents ..	170		S			Detail of categories E810–835.
			175	R	·416	·370	Motor and unspecified vehicle.
E840–845	Other road vehicle accidents ..	171		S			Detail of categories E840–845.
E850, 851	Submersion in water transport		172	S	·462	·818	Drowning.
E852–855	Falls in water transport ..		172	S	·310	·091	Falls.
E856–858	Other water transport accidents		172	S	·226	·091	Others in old 172.
E860–866	Aircraft accidents	173					
	Accidental poisoning by :						
E870–877	various drugs		179	S	·518	·650	Detail of drug categories.
E878	other and unspecified drugs..		79a	R	·03	nil	
			179	S	·090	·097	
E879	noxious foodstuffs		177	S	·03	·03	Fungi, noxious foodstuffs.
E880	alcohol		179	S	·061	·022	
E881	petroleum products		179	S	·017	·005	
E882	industrial solvents		79a	R	·14	nil	
			179	S	·030	·008	
E883	corrosive alkalis and acids ..		79a	R	·07	·08	
			179	S	·162	·125	
E884	mercury and compounds ..		179	S	·005	·008	
E885	lead and compounds ..	78					
			179	S	nil	·002	
E886	arsenic, antimony		179	S	·009	·005	
E887	fluorides		179	S	nil	nil	
E888	other and unspecified, solid or liquid		79a	R	·52	·92	
			79c	R	·33	·25	
			175	S, R	·0022	nil	
			179	S	·108	·078	
E890–895	gaseous substances	178					Detail of categories.
			79a	S, R	·21	nil	
			174	S, R	·009	nil	
			175	S, R	·0022	nil	
E900–904	Falls		174	S, R	·046	·57	Falls.
			175	S, R	·124	·09	Falls.
			186	S	·925	·994	Fall and fracture unspecified.
			195d	S	·0006	nil	Fall and fracture unspecified.
E910	Blow from falling object ..		174	S, R	·56	·29	Fall of coal, etc.
			175	S, R	·081	·03	Falling tree, etc.
			186	S	·075	·006	Falling masonry heavy objects.
			195d	S	·002	nil	Falling object.
E911	Accident caused by vehicle ..		174	S	20	nil	Tubs, trucks.
E912	Accident caused by machinery	176					
			174	S, R	·071	·07	
			175	S, R	·134	·21	
E913	Accident by cutting and piercing instruments	185					
			174	S, R	·0005	nil	
			175	S, R	·021	·01	Sharp object.
			195d	S	·032	·029	
E914	Accident by electric current ..	193					Electrocution.
			169	S	·032	·048	
			174	S, R	·0055	nil	
			175	S, R	·003	nil	
E915–917	Accidents by explosion, fire, hot substances	180					Explosion of gas.
		181					
			174	S			
			175	S, R	·0044	nil	
			195d	S	·108	·041	Explosions (not ammunition).

Table 2.—(*contd.*)

New-list No.	Title (abbreviated)	Whole groups of old list	Portions of old-list groups				Notes for years 1940–48
			Old No.	Method used	Proportion of old No. found		
					M.	F.	
E918	Accident by radiation		195bb	R	nil	nil	X-rays, radiation.
E919	Accident by firearm	184					Explosion, not gas.
			174	S			
			175	S, R	·0029	nil	
			195d	S	·035	·036	Explosion of ammunition.
E920	Foreign body in eye		195d	S	nil	nil	Foreign body, eye.
E921–925	Accidental obstruction or suffocation by foreign body or food	182					
			174	S, R	·0006	nil	
			175	S, R	·0029	nil	Swallowing foreign body.
			195d	S	·094	·200	
E926	Lack of care of infant under 1 year	195c					
E927	Accident by bite or sting, venomous	194	175	S, R	nil	nil	
E928	Other accidents caused by animals	188					
			174	S, R	·0018	nil	
			175	S, R	·206	·27	
E929	Accidental drowning and submersion	183					
			174	S, R	·0027	·07	
			175	S, R	·0015	·01	
			195d	S	·051	·049	Shock by immersion.
E930	High and low air pressure ..		195d	S	·0006	nil	Caisson disease, etc.
E391	Excessive heat	191					
E932, 933	Excessive cold, hunger, thirst, exposure	189					
		190					
			195d	S	·064	·076	Exposure.
E934	Cataclysm	187					
E935	Lightning	192					
E936	Other and unspecified accidents		174	S, R	·0095	nil	
			195d	S	·613	·569	
E940, 941	Generalized vaccinia and post-vaccinal encephalitis.. ..		195a	S (a1)	·93	·77	
E942	Other complications of smallpox vaccination		195a	S (a2)	·07	·23	
E943, 944	Complications of prophylactic inoculation not for smallpox		195bb	R	1·0	1·0	Includes E946.
E945	Complications of anæsthesia (non-therapeutic)	195ba					
E946	Other complications of non-therapeutic procedures ..						See E943–4.
E960–962	Late effects of accidental injury and poisoning						Included in E800–946.
E963	Late effects of self-inflicted injury						Included in E970–979.
E964, 965	Late effects of injury by others and by war						Included in E980–999.
	Suicide by poisoning :						
E970	analgesic and soporific ..	163ab 163ac					
E971	other solid or liquid	163aa 163ad					
E972	gas in domestic use	163ba					
E973	other gases	163bb 163bc					
E974	Suicide by hanging, strangulation	164a					
E975	Suicide by submersion	164b					
E976	Suicide by firearms, explosives	164c					
E977	Suicide by cutting or piercing instrument	164d					
E978	Suicide by jumping from high places	164e					
E979	Suicide by other and unspecified means	164f, g					
E980	Non-accidental poisoning by another	165 166					
E981–983	Assault	167					
E984	Injury by police intervention ..	168					
E985	Execution	198					
E990–999	Injury by war	196 197					

Table 3.—Causes of Death at Different Age-Periods, 1949, in England and Wales according to the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948.

Notes : (*a*) Excluding deaths of non-civilians.

(*b*) The sequence of causes of death followed in this table is that of the detailed International Statistical Classification of Diseases, Injuries and Causes of Death (Sixth revision, 1948), including the classification by External Cause of Injury (E codes) for violent deaths. Each three-digit code is separately specified, except a few which are not applicable to primary death classification, and certain 4th-digit splits of general interest are also shown. Comparable figures for 1949 classified according to the International List of Causes of Death (Fifth revision, 1938) have been published in tables 21 and 22 of Part I of the Statistical Review for 1949.

(*c*) Separate columns are not devoted to those causes to which, as a rule, few deaths are assigned. In order, however, to make the record complete, the classification numbers of such causes are printed as nearly as possible to the places where they would occur. The deaths, if any, from these causes are shown in footnotes in which the heavy-faced figures preceding the cause express the International Classification number, and the figures following it indicate the sex and age-group of the decedent, roman type for males and italic type for females. Thus **013**, Late effects of tuberculosis of bones and joints, **55**, *45*, *65* denotes that one male death (in age-group 55-) and two female deaths (one in age-group 45- and one in 65-) are assigned to this cause. A dash (—) indicates that no deaths are assigned.

Causes of death	All Causes		I 001-138 Infective and Parasitic Diseases		TUBERCULOSIS 001–019 All forms		001–008 Respiratory system		001 Respiratory tuberculosis with mention of occupational disease of lung		002 Pulmonary tuberculosis		003 Pleural tuberculosis		003.0 Pleurisy specified as tuberculous	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**259942**	**250031**	**14865**	**9915**	**11918**	**7879**	**10655**	**6816**	**262**	**9**	**10274**	**6731**	**66**	**47**	**24**	**11**
0–	13854	10028	493	423	92	74	21	19	—	—	19	16	1	2	—	1
1–	1081	898	270	251	138	104	19	24	—	—	19	22	—	—	—	—
2–	640	571	155	175	88	77	10	8	—	—	9	8	—	—	—	—
3–	484	342	115	104	53	54	6	8	—	—	5	7	—	—	—	—
4–	371	254	105	75	52	38	9	1	—	—	8	1	—	—	—	—
5–	1213	832	258	189	115	94	10	14	—	—	8	12	—	—	—	—
10–	903	683	132	149	76	102	20	42	—	—	18	42	1	—	1	—
15–	1442	1337	325	635	265	586	177	493	—	—	175	490	2	1	2	1
20–	2210	2153	682	1178	631	1114	546	1035	—	—	541	1031	3	4	3	2
25–	2821	2765	1004	1340	931	1276	844	1193	—	2	838	1186	4	1	4	1
30–	2630	2616	886	944	799	886	746	833	6	1	736	829	2	1	—	1
35–	4159	3689	1113	789	1034	716	972	667	10	—	956	665	3	—	3	—
40–	6254	4817	1202	639	1084	571	1021	527	26	3	986	521	1	3	1	1
45–	9808	6910	1396	573	1266	476	1195	438	26	—	1161	435	5	1	1	1
50–	13165	9520	1441	474	1252	378	1184	335	35	1	1142	332	3	2	1	1
55–	18932	13102	1514	492	1266	383	1226	337	65	—	1148	330	8	2	3	—
60–	26933	18832	1458	438	1166	319	1123	283	38	1	1072	273	6	8	2	2
65–	33647	27053	1209	406	922	282	883	259	30	1	840	251	8	6	—	—
70–	39543	37332	636	302	435	195	406	170	22	—	374	163	7	6	1	—
75–	37584	41090	322	179	190	102	179	89	4	—	166	80	7	6	2	—
80–	26036	34751	113	98	51	37	46	30	—	—	41	28	5	2	—	—
85 and over	16182	30456	36	62	12	15	12	11	—	—	12	9	—	2	—	—

Causes of death	TUBERCULOSIS 003.1 Pleurisy with effusion without mention of cause		004* 005 Tracheobronchial gland'l'r tuberculosis with symptoms		006* 007 Other respiratory tuberculosis		008 Unspecified site		010–019 Other forms		010 Meninges and central nervous system		011 Intestines, peritoneum, & mesenteric glands		012 Bones and joints, active or unspecified	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**42**	**36**	**5**	**7**	**30**	**6**	**18**	**15**	**1263**	**1063**	**558**	**533**	**146**	**148**	**146**	**119**
0–	1	1	1	1	—	—	—	—	71	55	48	37	3	1	—	—
1–	—	—	—	1	—	—	—	—	119	80	98	64	8	5	—	1
2–	—	—	1	—	—	—	—	—	78	69	66	57	4	5	1	1
3–	—	—	1	1	—	—	—	—	47	46	39	35	2	6	—	1
4–	—	—	—	—	1	—	—	—	43	37	40	34	—	1	1	—
5–	—	—	2	1	—	1	—	—	105	80	82	66	8	5	5	—
10–	—	—	—	—	—	—	1	—	56	60	36	49	5	4	5	2
15–	—	—	—	1	—	—	—	1	88	93	38	55	16	17	7	7
20–	—	2	—	—	1	—	1	—	85	79	27	42	11	13	13	4
25–	—	—	—	—	—	1	2	3	87	83	21	28	13	22	12	11
30–	2	—	—	—	2	—	—	2	53	53	6	18	7	13	12	8
35–	—	—	—	—	3	1	—	1	62	49	10	16	13	7	9	5
40–	—	2	—	—	4	—	4	—	63	44	18	8	6	7	9	11
45–	4	—	—	1	3	—	—	1	71	38	8	6	13	8	13	8
50–	2	1	—	—	3	—	1	—	68	43	4	5	11	12	9	11
55–	5	2	—	—	4	1	1	4	40	46	4	6	4	7	15	14
60–	4	6	—	—	6	—	1	1	43	36	6	4	3	2	9	10
65–	8	6	—	—	3	—	2	1	39	23	4	2	11	6	8	5
70–	6	6	—	—	—	1	3	—	29	25	2	1	5	4	11	9
75–	5	6	—	1	—	1	2	1	11	13	1	—	2	1	4	7
80–	5	2	—	—	—	—	—	—	5	7	—	—	1	1	3	3
85 and over	—	2	—	—	—	—	—	—	—	4	—	—	—	1	—	1

* **004**, Primary tuberculous complex with symptoms, *1* ; **006**, Radiological evidence suggestive of active respiratory tuberculosis not classifiable elsewhere, —.

TABLE 3.—(*contd.*)

Causes of death	TUBERCULOSIS															
	012.0 Active or unspecified tuberculosis of vertebral column		012.1; 2; 3 Others included under 012		013* 014 Skin and subcutaneous cellular tissue		015 Lymphatic system		016 Genito-urinary system		017 Adrenal glands		018 Other organs		019 Disseminated tuberculosis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**108**	**99**	**38**	**20**	**5**	**8**	**21**	**36**	**208**	**93**	**18**	**10**	**5**	**7**	**155**	**107**
0–	—	—	—	—	—	—	1	2	—	—	—	—	—	1	19	14
1–	—	1	—	—	—	—	—	3	1	—	—	—	—	—	12	7
2–	—	1	1	—	—	—	1	2	—	—	—	—	—	—	6	4
3–	—	—	—	1	—	—	3	1	—	—	—	—	—	—	3	3
4–	1	—	—	—	—	—	1	1	—	—	—	—	—	—	1	1
5–	4	—	1	—	—	—	3	4	3	—	—	—	—	—	4	5
10–	5	1	—	1	—	—	—	—	2	—	—	—	1	—	7	5
15–	6	4	1	3	—	1	1	2	15	3	—	1	1	—	10	7
20–	9	3	4	1	—	—	—	1	19	6	1	3	—	—	14	10
25–	9	10	3	1	—	—	1	2	25	11	1	—	—	—	14	9
30–	10	8	2	—	1	1	—	—	19	8	2	—	1	—	5	5
35–	9	4	—	1	—	—	—	—	17	11	1	1	1	—	11	9
40–	6	10	3	1	—	—	1	2	19	9	3	—	—	2	7	5
45–	11	7	2	1	1	—	—	—	24	10	4	1	—	—	8	4
50–	5	9	4	2	—	—	1	2	27	8	2	1	—	—	14	4
55–	13	12	2	2	1	1	1	3	5	8	3	2	—	2	6	3
60–	8	9	1	1	1	1	3	4	15	7	—	—	1	—	5	8
65–	5	4	3	1	1	—	1	1	9	2	—	1	—	2	5	3
70–	6	8	5	1	—	1	1	3	5	7	1	—	—	—	4	—
75–	1	5	3	2	—	1	2	1	2	2	—	—	—	—	—	1
80–	—	3	3	—	—	1	—	1	1	1	—	—	—	—	—	—
85 and over	—	—	—	1	—	1	—	1	—	—	—	—	—	—	—	—

Causes of death	Tuberculosis				020–029 Syphilis and its sequelæ		020 Congenital syphilis		021* 022 Aneurysm of aorta		023 Other cardio-vascular syphilis		024 Tabes dorsalis		025 General paralysis of insane	
	019.0; 1 Acute miliary tuberculosis		019.2 Other forms of disseminated tuberculosis													
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**22**	**13**	**133**	**94**	**1290**	**491**	**45**	**38**	**515**	**191**	**353**	**126**	**114**	**20**	**161**	**65**
0–	—	—	19	14	34	28	34	28	—	—	—	—	—	—	—	—
1–	2	—	10	7	—	1	—	1	—	—	—	—	—	—	—	—
2–	1	—	5	4	1	—	1	—	—	—	—	—	—	—	—	—
3–	1	1	2	2	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
5–	1	1	3	4	—	1	—	1	—	—	—	—	—	—	—	—
10–	—	—	7	5	2	3	1	2	1	—	—	—	—	—	—	1
15–	2	2	8	5	6	2	3	2	2	—	—	—	—	—	1	—
20–	1	2	13	8	5	—	—	—	1	—	—	—	—	—	4	—
25–	3	2	11	7	10	3	2	—	1	—	2	—	—	—	2	1
30–	1	2	4	3	12	6	2	1	3	1	2	1	—	—	3	1
35–	4	1	7	8	15	9	—	—	3	2	7	1	—	—	4	4
40–	—	1	7	4	35	14	—	1	4	3	11	4	1	—	11	6
45–	1	—	7	4	73	40	—	1	25	10	21	12	2	—	18	14
50–	2	—	12	4	132	53	—	—	40	9	53	14	10	4	23	17
55–	—	1	6	2	198	62	—	—	77	17	56	23	17	7	30	8
60–	1	—	4	8	238	62	1	—	106	23	63	20	25	6	24	6
65–	1	—	4	3	227	67	1	—	93	27	64	21	26	2	26	6
70–	1	—	3	—	156	65	—	—	70	39	43	22	23	1	12	—
75–	—	—	—	1	100	41	—	1	62	32	19	3	6	—	2	—
80–	—	—	—	—	38	24	—	—	23	20	10	3	2	—	1	1
85 and over	—	—	—	—	8	10	—	—	4	8	2	2	2	—	—	—

* **013,** Late effects of tuberculosis of bones and joints, 55, *45, 65* ; **021,** Early syphilis, *75.*

TABLE 3.—(*contd.*)

Causes of death	026 Other syphilis of central nervous system		027 Other forms of late syphilis		028* 029 Syphilis unqualified		030–039* 030–039 Gonococcal infection and other venereal diseases		040–049 Infectious diseases commonly arising in intestinal tract		040 Typhoid fever		041* 042 Other salmonella infections		043, 044* 045 Bacillary dysentery	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**29**	**19**	**36**	**13**	**37**	**18**	**3**	**2**	**75**	**69**	**10**	**9**	**24**	**31**	**17**	**8**
0–	—	—	—	—	—	—	—	—	9	12	—	—	4	8	4	2
1–	—	—	—	—	—	—	—	—	—	2	—	—	—	2	—	—
2–	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—
3–	—	—	—	—	—	—	—	—	2	—	1	—	—	—	1	—
4–	—	—	—	—	—	—	—	—	3	—	—	—	—	—	2	—
5–	—	—	—	—	—	—	—	—	3	2	—	1	—	—	2	—
10–	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—
15–	—	—	—	—	—	—	—	—	1	2	—	—	—	1	—	—
20–	—	—	—	—	—	—	—	1	1	4	—	1	—	—	—	—
25–	2	1	—	—	1	1	—	—	5	2	2	—	—	—	—	1
30–	—	2	—	—	2	—	—	1	4	4	—	—	1	—	1	—
35–	—	—	1	—	—	2	1	—	—	4	—	—	—	1	—	—
40–	4	—	2	—	2	—	—	—	9	2	2	—	3	1	3	—
45–	1	1	4	—	2	2	1	—	7	1	—	—	2	1	1	—
50–	2	5	2	1	2	3	—	—	4	3	1	—	1	2	2	—
55–	4	4	7	1	7	2	—	—	7	4	1	—	4	3	—	1
60–	5	2	8	2	6	3	—	—	8	8	2	2	4	4	—	—
65–	5	3	7	5	5	3	—	—	1	6	—	3	1	2	—	1
70–	2	1	2	1	4	1	—	—	6	4	—	—	3	2	1	1
75–	4	—	3	3	4	1	1	—	4	5	1	—	—	2	—	2
80–	—	—	—	—	2	—	—	—	—	2	—	—	—	2	—	—
85 and over	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—

Causes of death	046 Amœbiases		047, 048* 049 Food poisoning (infection & intoxication)		050–064 Other bacterial diseases		050 Scarlet fever		051 Streptococcal sore throat		052 Erysipelas		053 Septicæmia and pyæmia		054* 055 Diphtheria	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**9**	**4**	**4**	**5**	**657**	**627**	**13**	**14**	**23**	**43**	**27**	**27**	**86**	**60**	**45**	**39**
0–	—	—	—	—	276	239	—	—	1	2	1	—	25	12	1	1
1–	—	—	—	—	60	87	1	—	2	2	1	—	4	—	2	5
2–	—	—	—	—	31	57	—	1	1	3	—	—	1	4	4	5
3–	—	—	—	—	31	22	—	—	—	2	—	—	—	2	10	5
4–	—	—	—	—	22	17	—	—	1	1	—	—	1	—	6	4
5–	—	—	1	—	41	29	4	6	—	2	—	—	3	2	11	7
10–	—	—	—	—	12	17	1	2	1	2	—	—	1	2	1	5
15–	—	—	1	1	13	5	2	—	—	1	—	—	2	1	—	—
20–	1	1	—	—	10	5	1	1	—	—	—	—	3	—	2	—
25–	2	—	—	1	6	13	—	1	1	4	—	—	1	3	2	2
30–	2	—	—	—	11	11	1	—	1	1	1	—	5	2	—	—
35–	—	1	—	—	9	9	1	—	3	2	—	—	3	3	1	1
40–	1	—	—	1	17	11	—	1	1	2	1	—	2	2	3	—
45–	2	—	—	—	17	11	—	1	1	1	1	—	8	3	—	2
50–	—	—	—	1	12	13	—	1	—	2	2	2	3	5	1	1
55–	—	—	1	—	16	10	1	—	2	2	—	3	7	1	—	—
60–	—	1	—	—	17	11	—	—	3	3	—	5	4	—	—	—
65–	—	—	—	—	18	17	1	—	2	3	2	2	5	6	—	—
70–	1	—	—	1	13	9	—	—	2	1	5	4	2	3	—	—
75–	—	1	1	—	12	12	—	—	1	—	4	1	2	7	1	—
80–	—	—	—	—	8	12	—	—	—	4	6	3	2	2	—	1
85 and over	—	—	—	—	5	10	—	—	—	3	3	7	2	—	—	—

* **028,** Latent syphilis, —; **030,** Acute or unspecified gonorrhœa, 35, 75; **031,** Chronic gonococcal infection of genito-urinary system, *30*; **032,** Gonococcal infection of joint, —; **033,** Gonococcal infection of eye, —; **034,** Gonococcal infection of other sites, 5, *20*; **035,** Late effects of gonococcal infection, —; **036,** Chancroid, —; **037,** Lymphogranuloma venereum, —; **038,** Granuloma nguinale, venereal, —; **039,** Other and unspecified venereal diseases, —; **041,** Paratyphoid fever, 0, 4, 45, 55, 60, *0, 5, 20, 30, 30, 0, 30, 35*; **043,** Cholera, —; **044,** Brucellosis (undulant fever), 25, 45, 60; **047,** Other protozoal dysentery, —; **048,** Unspecified orms of dysentery, 70, 75, 75, *0, 20, 35, 60*; **054,** Bacterial toxæmia, *60, 65*.

TABLE 3.—(*contd.*)

Causes of death	056 Whooping cough		057 Meningo-coccal infections		058, 059, 060* 061 Tetanus		062* 063 Gas gangrene		064* 070–074 Spirochætal diseases, except syphilis		070, 071* 072 Leptospirosis icterohæ-morrhagica (Weil's disease)		073, 074* 080–096 Diseases attributable to viruses		080 Acute poliomyeliti	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**238**	**289**	**154**	**133**	**61**	**18**	**7**	**2**	**39**	**2**	**36**	**1**	**839**	**809**	**355**	**288**
0–	179	178	67	45	1	1	—	—	1	—	—	—	72	66	9	16
1–	29	59	19	21	2	—	—	—	—	1	—	—	72	56	14	14
2–	11	31	12	12	2	1	—	—	—	—	—	—	34	39	16	12
3–	7	9	9	3	5	1	—	—	—	—	—	—	29	28	12	13
4–	3	6	9	5	2	1	—	—	—	—	—	—	28	20	19	4
5–	9	4	8	8	6	—	—	—	—	—	—	—	98	63	58	34
10–	—	—	2	5	6	1	—	—	—	—	—	—	41	26	33	23
15–	—	—	6	2	3	1	—	—	—	—	—	—	38	39	32	30
20–	—	—	1	4	2	—	1	—	1	—	1	—	34	52	30	38
25–	—	—	1	2	1	1	—	—	1	—	1	—	49	46	37	33
30–	—	—	2	7	1	1	—	—	2	—	2	—	57	36	39	25
35–	—	—	—	2	1	1	—	—	3	—	3	—	48	49	23	20
40–	—	—	8	5	2	1	—	—	6	1	5	1	47	37	14	10
45–	—	—	2	2	3	2	1	—	6	—	6	—	24	40	6	6
50–	—	—	2	1	4	1	—	—	5	—	5	—	31	24	4	5
55–	—	—	1	2	4	1	1	1	4	—	4	—	21	28	2	3
60–	—	—	2	2	7	—	—	—	3	—	3	—	25	32	3	1
65–	—	—	2	2	4	2	2	1	5	—	5	—	31	31	4	—
70–	—	—	—	—	3	1	1	—	1	—	—	—	25	29	—	1
75–	—	2	1	2	2	—	1	—	—	—	—	—	11	19	—	—
80–	—	—	—	1	—	1	—	—	1	—	1	—	14	23	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	10	26	—	—

Causes of death	080.0 Specified as bulbar or polio-encephalitis		080.1 With other paralysis		080.2* 080.3 Unspecified		081 Late effects of acute poliomyelitis		082 Acute infectious encephalitis		083 Late effects of acute infectious encephalitis		084* 085 Measles		086* 087 Chickenpox	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**155**	**121**	**17**	**12**	**183**	**155**	**4**	**4**	**105**	**91**	**76**	**95**	**152**	**155**	**7**	**7**
0–	4	7	—	1	5	8	—	—	7	3	—	—	45	41	2	2
1–	7	8	—	—	7	6	—	—	6	—	—	—	46	39	2	1
2–	9	3	2	—	5	9	—	—	—	5	—	—	17	18	—	1
3–	3	8	1	—	8	5	—	—	3	—	1	—	7	13	—	—
4–	13	3	1	—	5	1	—	—	2	2	—	1	5	11	1	1
5–	27	12	3	1	28	21	—	—	5	4	1	—	22	18	1	1
10–	15	12	1	2	17	9	—	1	3	—	—	—	3	1	—	—
15–	14	10	3	2	15	18	—	—	3	4	—	—	2	—	—	—
20–	9	12	1	4	20	22	1	1	1	5	—	—	—	4	—	—
25–	17	15	3	—	17	18	—	1	6	3	—	2	1	2	—	—
30–	14	14	—	—	25	11	2	—	6	2	5	3	1	1	—	—
35–	9	5	1	1	13	14	—	—	6	5	13	15	—	2	1	—
40–	5	4	—	1	9	5	—	—	13	9	12	10	—	1	—	—
45–	3	3	—	—	3	3	—	—	5	15	6	9	1	—	—	—
50–	1	4	—	—	3	1	1	1	8	4	8	10	1	—	—	—
55–	1	—	—	—	1	3	—	—	8	10	6	9	—	—	—	—
60–	1	1	—	—	2	—	—	—	3	6	7	10	—	—	—	—
65–	3	—	1	—	—	—	—	—	9	3	11	11	—	1	—	—
70–	—	—	—	—	—	1	—	—	10	6	4	11	—	2	—	—
75–	—	—	—	—	—	—	—	—	1	2	2	3	—	—	—	1
80–	—	—	—	—	—	—	—	—	—	3	—	1	1	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—

* **058,** Plague, — ; **059,** Tularæmia, — ; **060,** Leprosy, — ; **062,** Anthrax, 45, 60 ; **064,** Other bacterial diseases, 0 ; **070,** Vincent infections, 0, 40, 70, *1* ; **071,** Relapsing fever, — ; **073,** Yaws, — ; **074,** Other spirochætal and leptospirochætal infections, — **080.2,** Specified as non-paralytic, — ; **084,** Smallpox, 60, *20, 30, 60, 65* ; **086,** Rubella (German measles), 0, *5*.

TABLE 3.—(*contd.*)

Causes of death	088 Herpes zoster		089 Mumps		090, 091* 092 Infectious hepatitis		093, 094, 095* 096 Other diseases attributable to viruses		100–108* 100–108 Typhus and other rickettsial diseases		110–117 Malaria		110, 111* 112 Falciparum malaria (malignant tertian)		113–117* 120–138 Other infective and parasitic diseases	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**20**	**36**	—	**3**	**114**	**116**	**3**	**9**	—	—	**5**	—	**1**	—	**39**	**36**
0–	—	—	—	—	8	4	—	—	—	—	—	—	—	—	9	4
1–	—	—	—	—	4	2	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	1	3	—	—	—	—	—	—	—	—	1	1
3–	—	—	—	1	6	1	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	10	5	1	—	—	—	—	—	—	—	1	—
10–	—	—	—	—	2	1	—	—	—	—	—	—	—	—	1	—
15–	—	—	—	—	1	5	—	—	—	—	—	—	—	—	2	1
20–	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	2
25–	—	—	—	—	5	5	—	—	—	—	1	—	—	—	1	—
30–	—	—	—	—	4	3	—	1	—	—	—	—	—	—	1	—
35–	—	—	—	—	5	7	—	—	—	—	—	—	—	—	3	2
40–	—	—	—	—	8	7	—	—	—	—	1	—	—	—	3	3
45–	—	—	—	—	6	10	—	—	—	—	—	—	—	—	2	5
50–	1	—	—	—	8	4	—	—	—	—	—	—	—	—	5	3
55–	—	—	—	—	5	6	—	—	—	—	1	—	—	—	1	5
60–	1	1	—	—	10	13	—	—	—	—	—	—	—	—	1	6
65–	—	2	—	1	7	10	—	2	—	—	—	—	—	—	5	3
70–	1	1	—	—	10	7	—	1	—	—	—	—	—	—	—	—
75–	3	4	—	—	5	7	—	2	—	—	2	—	1	—	2	—
80–	8	14	—	—	4	3	1	2	—	—	—	—	—	—	1	—
85 and over	6	14	—	1	3	9	1	1	—	—	—	—	—	—	—	1

Causes of death	120–124* 125 Hydatid disease		126–131* 132 Actinomycosis		133* 134 Other fungus infections		135, 136, 137* 138 Other infective and parasitic diseases		NEOPLASMS II 140-239 Neoplasms		140–205 Malignant neoplasms including neoplasms of lymphatic and hæmatopoietic tissues		140–148 Malignant neoplasm of buccal cavity and pharynx		140 Lip	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**6**	**9**	**13**	**11**	**11**	**8**	**4**	**5**	**43124**	**42054**	**42196**	**41008**	**1560**	**580**	**160**	**19**
0–	—	—	—	—	8	3	1	—	**61**	**43**	37	25	—	—	—	—
1–	—	—	—	—	—	—	—	—	**50**	**55**	44	47	—	—	—	—
2–	—	—	—	—	—	—	—	—	**63**	**57**	59	53	—	—	—	—
3–	—	—	—	—	—	—	—	—	**52**	**32**	46	31	1	—	—	—
4–	—	—	—	—	—	—	—	—	**38**	**38**	34	35	—	—	—	—
5–	—	—	—	—	—	—	—	—	**119**	**85**	100	71	3	1	—	—
10–	—	—	—	—	1	—	—	—	**114**	**61**	89	55	1	1	—	—
15–	—	—	2	1	—	—	—	—	**112**	**108**	101	93	1	1	—	—
20–	—	1	—	1	—	—	—	—	**192**	**130**	174	115	3	1	—	—
25–	—	—	1	—	—	—	—	—	**288**	**245**	264	216	2	1	—	—
30–	—	—	—	—	—	—	—	—	**339**	**430**	312	398	5	8	—	—
35–	—	1	2	—	—	—	1	1	**658**	**929**	610	871	17	8	1	—
40–	1	—	1	3	—	—	—	—	**1327**	**1583**	1256	1489	16	13	1	—
45–	1	—	—	3	1	1	—	1	**2298**	**2596**	2218	2470	36	27	1	—
50–	—	—	2	1	—	2	2	—	**3252**	**3407**	3165	3291	53	43	6	—
55–	1	3	—	1	—	—	—	1	**4571**	**4316**	4445	4206	85	60	7	—
60–	—	3	1	—	—	1	—	2	**6060**	**5124**	5963	5016	150	74	6	1
65–	3	1	1	1	1	—	—	—	**7132**	**6060**	7051	5979	264	85	15	1
70–	—	—	—	—	—	—	—	—	**7275**	**6364**	7207	6291	364	88	33	3
75–	—	—	2	—	—	—	—	—	**5473**	**5344**	5425	5273	317	81	41	2
80–	—	—	1	—	—	—	—	—	**2661**	**3283**	2633	3239	174	63	31	7
85 and over	—	—	—	—	—	1	—	—	**989**	**1764**	963	1741	68	25	18	5

* **090,** —; **091,** Yellow fever, —; **093,** Glandular fever (infectious mononucleosis), 20; **094,** Rabies, —; **095,** Trachoma, —; **0,** Louse-borne epidemic typhus, —; **101,** Flea-borne endemic typhus (murine), —; **102,** Brill's disease, not specified as louse flea-borne typhus, —; **103,** Tabardillo (Mexican typhus), not specified as louse or flea-borne, —; **104,** Tick-borne typhus, —; **5,** Mite-borne typhus, —; **106,** Wolhynian fever (trench fever), —; **107,** Typhus unspecified, —; **108,** Other rickettsial diseases, ; **110,** Vivax malaria (benign tertian), —; **111,** Malariæ malaria (quartan), —; **113,** Ovale malaria, —; **114,** Mixed malarial ections, —; **115,** Blackwater fever, 25, 40, 55, 75; **116,** Other and unspecified forms of malaria, —; **117,** Recurrent induced laria, —; **120,** Leishmaniasis, 5, 30, 40; **121,** Trypanosomiasis, —; **122,** Other protozoal diseases, *0*; **123,** Schistosomiasis, 50; **4,** Other trematode infestation, —; **126,** Other cestode infestation, —; **127,** Filariasis, —; **128,** Trichiniasis, —; **129,** Ankylo-miasis, —; **130,** Infestation with worms of other, mixed and unspecified type, —; **131,** Dermatophytosis, 2, *2*, *65*; **133,** Coccidioidomycosis, —; **135,** Scabies, —; **136,** Pediculosis, —; **137,** Other arthropod infestation, —.

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS															
	141 Tongue		142 Salivary gland		143 Floor of mouth		144 Other parts of mouth and mouth unspecified		145 Oral meso-pharynx		146 Naso-pharynx		147 Hypo-pharynx		148 Pharynx, unspecified	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**499**	**156**	**88**	**56**	**87**	**16**	**244**	**65**	**157**	**33**	**48**	**34**	**56**	**106**	**221**	**95**
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	1	—	—	—	1	1	—	—	—	—	—	—	1	—
10–	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
15–	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
20–	—	—	3	1	—	—	—	—	—	—	—	—	—	—	—	—
25–	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	—
30–	1	2	1	1	—	—	1	—	1	—	1	—	—	2	—	3
35–	5	—	2	—	1	—	1	1	1	—	2	2	1	2	3	3
40–	—	2	4	3	1	—	1	—	3	3	4	2	1	2	1	1
45–	10	3	2	5	2	—	4	1	3	1	4	3	2	7	8	7
50–	13	12	4	2	2	—	7	5	3	2	6	1	2	13	10	8
55–	30	11	6	1	2	2	14	9	9	4	3	4	4	18	10	11
60–	45	22	8	9	12	2	21	6	19	1	8	6	5	14	26	13
65–	91	24	16	7	17	4	36	4	24	5	5	7	16	20	44	13
70–	133	24	17	11	19	2	58	15	40	6	4	2	10	11	50	14
75–	107	33	9	7	19	3	55	12	28	7	7	2	11	8	40	7
80–	55	17	9	7	8	2	31	9	20	3	2	1	3	7	15	10
85 and over	9	6	6	2	4	1	14	2	6	1	—	4	1	1	10	3

Causes of death	NEOPLASMS															
	150–159 Malignant neoplasm of digestive organs and peritoneum		150 Œsophagus		151 Stomach		152 Small intestine including duodenum		153 Large intestine except rectum		154 Rectum		155 Biliary passages and of liver (stated to be primary site)		156 Liver (secondary and unspecified)	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**20609**	**18524**	**1439**	**786**	**8065**	**6139**	**113**	**102**	**4509**	**5932**	**3762**	**2609**	**461**	**726**	**589**	**649**
0–	5	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1
1–	5	4	—	—	—	—	—	—	—	1	—	—	—	—	3	1
2–	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	3	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
4–	3	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
5–	6	1	—	—	—	—	1	—	2	—	—	—	—	—	—	—
10–	3	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
15–	4	9	1	—	1	1	—	2	—	3	1	1	—	—	1	—
20–	19	14	1	—	1	2	3	—	3	1	7	4	—	2	1	—
25–	54	41	2	1	20	16	3	—	9	10	12	4	1	3	3	3
30–	84	79	2	2	41	28	1	—	20	25	12	14	5	2	—	3
35–	223	225	7	8	84	77	2	3	56	75	41	37	3	8	7	5
40–	480	345	15	21	241	105	7	3	100	111	57	53	14	12	7	13
45–	830	664	29	22	389	198	6	6	161	196	107	129	26	27	23	23
50–	1273	1061	68	47	594	317	14	12	229	352	183	175	33	47	34	24
55–	1909	1490	123	82	888	457	10	10	304	464	266	223	51	63	54	41
60–	2793	2124	185	93	1201	697	13	16	535	660	475	268	56	87	84	85
65–	3657	2825	269	134	1470	996	24	18	769	814	651	387	73	128	103	105
70–	4064	3517	322	140	1474	1238	17	15	921	1062	857	500	83	138	113	115
75–	3153	3134	268	134	1045	1109	7	9	794	1010	658	419	68	122	94	108
80–	1507	1964	112	69	458	615	4	6	428	751	335	253	32	51	41	72
85 and over	533	1023	35	33	158	283	1	2	175	397	100	142	16	36	20	50

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS															
	157 Pancreas		158 Peritoneum		159 Unspecified digestive, organs		160–165 Malignant neoplasm of respiratory system		160 Nose, nasal cavities, middle ear, and accessory sinuses		161 Larynx		162 Trachea, and of bronchus and lung specified as primary		163 Lung and bronchus, unspecified as to whether primary or secondary	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**1514**	**1363**	**153**	**212**	**4**	**6**	**10189**	**2207**	**120**	**87**	**787**	**199**	**2213**	**485**	**6917**	**1360**
0–	—	—	4	—	—	—	—	1	—	—	—	—	—	1	—	—
1–	—	1	2	1	—	—	1	1	—	—	—	—	—	—	—	—
2–	—	—	1	2	—	—	1	—	—	—	—	—	—	—	—	—
3–	—	—	2	1	—	—	2	—	—	—	—	—	—	—	1	—
4–	—	—	2	—	—	—	—	1	—	—	—	—	—	—	—	1
5–	—	—	3	1	—	—	1	1	—	—	—	—	—	—	1	1
10–	—	—	2	—	—	—	2	1	—	1	—	—	—	—	1	—
15–	—	—	—	2	—	—	5	4	—	—	—	1	2	1	1	1
20–	—	2	3	3	—	—	18	4	—	2	—	—	5	—	12	1
25–	1	2	3	2	—	—	32	12	1	—	2	1	11	5	13	6
30–	2	3	1	2	—	—	57	27	—	3	1	—	19	12	32	11
35–	15	8	8	4	—	—	155	54	6	—	5	6	56	18	87	28
40–	31	20	8	7	—	—	390	97	1	2	6	3	120	37	260	52
45–	81	47	8	16	—	—	897	125	12	3	32	7	260	36	584	77
50–	104	70	13	17	1	—	1274	190	18	8	38	14	321	54	882	110
55–	191	124	22	26	—	—	1651	290	12	9	77	33	418	56	1126	182
60–	217	193	26	24	1	1	1942	309	14	6	128	25	386	61	1386	211
65–	278	206	19	35	1	2	1755	419	16	8	140	38	350	89	1226	266
70–	266	272	11	37	—	—	1160	322	18	19	160	32	174	69	790	191
75–	210	208	8	13	1	2	571	196	13	16	116	19	64	32	363	121
80–	91	136	6	11	—	—	210	114	7	8	60	17	23	12	117	70
85 and over	27	71	1	8	—	1	65	39	2	2	22	3	4	2	35	31

Causes of death	NEOPLASMS													
	164 Mediastinum		165 Thoracic organs (secondary)		170–181 Malignant neoplasm of breast and genito-urinary organs		170 Breast		171 Cervix uteri	172 Corpus uteri	173 Other parts of uterus, including chorione-pithelioma	174 Uterus unspecified
Ages at death	M	F	M	F	M	F	M	F	F	F	F	F
All Ages	**130**	**69**	**22**	**7**	**5565**	**15982**	**78**	**7875**	**2138**	**514**	**16**	**1579**
0–	—	—	—	—	4	3	—	—	—	—	—	—
1–	1	1	—	—	8	8	—	—	1	—	—	—
2–	1	—	—	—	10	11	—	—	—	—	—	—
3–	1	—	—	—	8	3	—	—	—	—	—	—
4–	—	—	—	—	4	9	—	—	—	—	—	1
5–	—	—	—	—	13	7	—	—	—	—	—	—
10–	1	—	—	—	2	5	—	—	—	—	—	—
15–	1	1	1	—	5	8	—	1	—	—	—	1
20–	1	1	—	—	24	18	—	1	2	—	—	2
25–	5	—	—	—	35	57	—	17	15	1	2	4
30–	5	1	—	—	31	174	1	91	36	1	3	7
35–	—	2	1	—	34	432	—	233	78	4	1	32
40–	2	2	1	1	94	847	2	474	113	15	1	53
45–	8	1	1	1	151	1389	4	688	244	26	—	99
50–	13	3	2	1	215	1701	5	815	270	48	1	162
55–	16	8	2	2	368	2005	13	915	307	82	5	230
60–	21	6	7	—	600	2115	9	985	327	77	—	227
65–	19	16	4	2	916	2106	9	1062	272	99	1	230
70–	18	11	—	—	1211	1965	16	958	213	69	2	219
75–	12	8	3	—	1066	1573	14	793	150	45	—	180
80–	3	7	—	—	564	924	4	518	71	30	—	88
85 and over	2	1	—	—	202	522	1	324	39	17	—	44

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS											
	175 Ovary, Fallopian tube, and broad ligament	176 Other and unspecified female genital organs	177 Prostate	178 Testis	179 Other and unspecified male genital organs	180 Kidney		181 Bladder and other urinary organs		190–199 Malignant neoplasm other and unspecified sites	
Ages at death	F	F	M	M	M	M	F	M	F	M	F
All Ages	**2350**	**425**	**2963**	**187**	**158**	**562**	**384**	**1617**	**701**	**2381**	**2277**
0–	—	—	1	—	—	3	2	—	1	10	
1–	—	—	—	1	—	6	6	1	1	13	11
2–	—	—	—	—	—	9	10	1	1	8	11
3–	—	—	—	—	—	8	3	—	—	6	11
4–	1	—	—	—	—	4	7	—	—	10	
5–	—	1	—	2	—	11	6	—	—	24	3
10–	5	—	—	1	—	1	—	—	—	30	1
15–	6	—	—	4	—	1	—	—	—	32	2
20–	12	—	—	21	1	2	1	—	—	43	3
25–	14	3	2	27	1	5	1	—	—	51	5
30–	28	7	—	23	2	3	1	2	—	53	5
35–	66	1	—	23	—	6	8	5	9	76	8
40–	165	10	8	28	4	25	9	27	7	129	11
45–	275	15	21	15	7	47	19	57	23	165	15
50–	312	30	40	9	5	58	26	98	37	195	17
55–	346	29	122	6	8	68	25	151	66	249	22
60–	316	48	253	4	16	77	56	241	79	281	22
65–	297	73	508	7	18	98	58	276	114	281	28
70–	244	73	770	8	29	74	58	314	129	257	25
75–	161	69	718	5	34	36	53	259	122	228	21
80–	76	37	382	3	26	15	28	134	76	155	14
85 and over	26	29	138	—	7	5	7	51	36	85	11

Causes of death	NEOPLASMS															
	190 Malignant melanoma of skin		191 Other malignant neoplasm of skin		192 Eye		193 Brain and other parts of nervous system		194 Thyroid gland		195 Other endocrine glands		196 Bone (including jaw bone)		197 Connective tissue	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**71**	**102**	**447**	**351**	**69**	**41**	**654**	**462**	**82**	**254**	**41**	**63**	**499**	**409**	**52**	**5**
0–	—	—	—	—	1	—	7	3	—	—	1	—	1	3	—	
1–	—	—	—	—	—	—	7	9	—	—	1	5	2	3	—	—
2–	—	—	—	—	—	1	6	8	—	—	2	2	—	2	—	—
3–	1	—	—	—	1	—	2	5	—	—	1	3	—	1	—	—
4–	—	—	—	1	—	1	8	2	—	—	1	3	—	—	—	—
5–	—	—	—	—	—	1	17	16	—	—	—	6	4	7	—	—
10–	—	1	—	—	—	—	18	9	—	—	2	—	10	5	—	—
15–	—	—	1	2	1	—	11	6	—	—	—	2	18	11	—	
20–	1	2	2	—	—	—	20	13	—	1	—	4	15	8	3	—
25–	1	9	1	2	1	—	24	25	—	—	1	2	15	10	2	
30–	2	7	4	3	—	—	27	26	3	1	1	2	10	6	1	
35–	2	6	4	5	1	1	42	34	3	3	1	4	10	6	5	
40–	6	13	5	6	6	2	68	35	2	11	4	3	14	19	—	
45–	7	9	10	12	3	2	90	54	1	16	6	6	21	18	5	
50–	4	8	13	12	5	3	85	53	6	21	4	4	34	29	2	
55–	13	6	16	22	7	3	98	65	9	23	4	3	47	37	5	
60–	7	6	39	14	6	7	71	48	11	30	4	4	60	56	8	
65–	8	11	52	36	12	7	34	26	14	46	4	3	66	62	5	
70–	8	9	93	48	5	5	12	16	12	42	2	6	67	47	1	
75–	5	6	69	59	7	3	7	7	10	34	2	—	56	45	9	
80–	3	5	82	58	—	2	—	2	7	17	—	1	38	26	6	
85 and over	3	4	56	71	4	3	—	—	4	9	—	—	11	8	—	

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS															
	198 Secondary and unspecified malignant neoplasm of lymph nodes		199 Other and unspecified sites		200–205 Neoplasms of lymphatic and hæmatopoietic tissues		200 Lymphosarcoma and reticulosarcoma		201 Hodgkin's disease		202 Other forms of lymphoma (reticulosis)		203 Multiple myeloma (plasmocytoma)		204 Leukæmia and aleukæmia	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**83**	**41**	**392**	**501**	**1892**	**1441**	**394**	**249**	**451**	**246**	**41**	**36**	**91**	**105**	**905**	**798**
0–	—	—	—	2	18	11	4	1	2	—	—	—	—	—	12	10
1–	—	—	3	—	17	17	1	2	—	—	—	1	—	—	16	14
2–	—	1	—	2	39	24	3	—	—	1	1	—	—	—	35	23
3–	—	—	1	2	26	16	4	1	1	—	1	1	—	—	20	14
4–	—	—	1	—	17	18	1	1	—	—	—	—	—	—	16	17
5–	—	—	3	2	53	32	12	1	8	—	1	1	—	—	32	30
10–	—	—	—	2	51	31	6	2	6	2	1	—	—	—	38	27
15–	—	—	1	—	54	46	4	7	16	8	—	—	—	—	34	31
20–	—	1	2	1	67	48	14	7	24	17	3	2	—	—	26	22
25–	—	—	6	10	90	46	18	9	38	16	1	2	1	—	32	19
30–	1	1	4	8	82	54	6	4	33	18	—	3	2	1	41	28
35–	—	2	8	16	105	72	21	7	46	28	3	3	1	1	34	33
40–	—	3	24	19	147	75	25	14	58	14	7	2	5	5	52	40
45–	1	2	21	31	139	114	29	24	41	22	3	1	7	11	59	56
50–	9	5	33	34	155	121	46	25	42	24	4	3	11	15	51	53
55–	10	6	40	56	183	137	41	28	40	15	3	3	15	17	83	74
60–	15	4	60	53	197	167	47	31	30	26	6	4	15	25	98	79
65–	16	4	70	86	178	156	36	24	31	22	5	3	16	18	88	88
70–	14	4	43	72	151	141	42	29	22	18	2	5	13	7	69	82
75–	15	3	48	51	90	75	25	19	10	8	—	2	5	4	49	39
80–	2	2	17	34	23	26	5	10	3	5	—	—	—	1	14	10
85 and over	—	3	7	20	10	14	4	3	—	2	—	—	—	—	6	9

Causes of death	NEOPLASMS															
	204.0 Lymphatic leukæmia		204.1 Myeloid leukæmia		204.2 Monocytic leukæmia		204.3 Acute leukæmia, unspecified type		204.4 Other and unspecified leukæmia		205 Mycosis fungoides		210–229 Benign Neoplasm		210 Buccal cavity and pharynx	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**322**	**228**	**308**	**311**	**46**	**57**	**133**	**114**	**96**	**88**	**10**	**7**	**371**	**625**	**3**	**3**
0–	—	2	4	3	—	—	6	4	2	1	—	—	16	13	—	—
1–	4	5	4	3	—	—	4	3	4	3	—	—	3	2	—	—
2–	17	11	7	6	—	1	8	4	3	1	—	—	2	2	—	—
3–	7	5	3	2	—	1	7	3	3	3	—	—	3	—	—	—
4–	8	7	3	—	—	1	4	6	1	3	—	—	—	1	—	—
5–	13	8	7	7	1	—	9	12	2	3	—	—	9	4	—	—
10–	16	10	5	7	1	1	10	6	6	3	—	—	6	1	—	—
15–	12	8	9	6	—	5	11	10	2	2	—	—	4	9	—	—
20–	5	4	8	10	2	1	10	5	1	2	—	—	10	9	—	—
25–	4	6	20	5	1	2	5	4	2	2	—	—	8	15	—	—
30–	7	3	22	11	3	4	6	6	3	4	—	—	8	20	—	—
35–	6	4	19	23	1	3	6	2	2	1	—	—	19	33	—	—
40–	10	6	26	21	7	4	5	7	4	2	—	—	25	62	—	1
45–	20	10	21	23	3	10	8	7	7	6	—	—	23	88	—	—
50–	8	13	21	21	5	4	9	7	8	8	1	1	23	65	1	—
55–	30	18	25	33	7	7	8	10	13	6	1	—	33	57	1	—
60–	44	24	32	37	4	3	5	5	13	10	1	2	34	59	—	1
65–	39	29	34	35	2	6	7	5	6	13	2	1	35	52	1	—
70–	34	31	21	37	5	3	3	3	6	8	3	—	41	43	—	—
75–	28	14	12	16	2	—	2	4	5	5	1	3	33	45	—	1
80–	6	6	4	3	1	—	—	1	3	—	1	—	18	28	—	—
85 and over	4	4	1	2	1	1	—	—	—	2	—	—	18	17	—	—

(55588)

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS															
	211 Other parts of digestive system		212 Respiratory system		213* 214 Uterine fibromyoma	215 Uterus	216 Ovary	217, 218* 219 Kidney and other urinary organs		220, 221, 222* 223 Brain and other parts of nervous system		224 Endocrine glands	
Ages at death	M	F	M	F	F	F	F	M	F	M	F	M	F
All Ages	**36**	**34**	**25**	**10**	**169**	**17**	**141**	**120**	**28**	**120**	**159**	**23**	**2**
0–	3	2	5	1	—	—	—	—	—	2	3	1	—
1–	—	—	—	1	—	—	—	1	—	1	1	—	—
2–	—	1	2	—	—	—	—	—	—	—	1	—	—
3–	—	—	1	—	—	—	—	—	—	1	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	
5–	—	—	1	—	—	—	—	—	—	5	4	3	—
10–	—	—	—	—	—	—	—	—	—	4	1	2	—
15–	1	—	—	—	—	—	—	—	—	2	6	—	
20–	—	1	—	—	—	—	4	—	—	9	3	—	—
25–	1	—	—	—	1	1	4	—	—	5	7	2	
30–	—	—	—	1	7	1	2	—	—	4	6	2	
35–	3	—	—	2	10	3	4	1	—	9	11	2	
40–	1	2	—	—	26	2	10	3	1	15	14	2	
45–	2	2	1	—	47	2	11	3	1	14	17	2	
50–	4	1	2	2	31	—	10	4	1	10	18	1	
55–	2	5	3	—	12	—	13	8	—	12	21	2	
60–	2	3	2	1	3	4	20	13	3	11	19	3	
65–	4	5	4	1	7	3	16	13	3	7	16	1	—
70–	5	6	1	—	5	—	17	29	5	5	5	—	—
75–	3	2	3	—	13	1	14	21	5	4	4	—	—
80–	3	3	—	1	5	—	10	11	5	—	2	—	—
85 and over	2	1	—	—	2	—	6	13	4	—	—	—	—

Causes of death	NEOPLASMS															
	225 Bone and cartilage		226 Lipoma		227 Muscular and connective tissue		228 Hæmangioma and lymphangi-oma		229* 230–239 Neoplasm of unspecified nature		230 Unspecified nature of digestive organs		231 Unspecified nature of respiratory organs		232–235* 236 Unspecifie nature of other genit urinary organs	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**11**	**7**	**2**	**4**	**2**	**4**	**8**	**11**	**557**	**421**	**27**	**31**	**35**	**8**	**11**	
0–	—	—	—	—	—	—	5	6	8	5	1	—	1	—	—	—
1–	—	—	—	—	—	—	—	—	3	6	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—
3–	—	—	—	—	—	—	1	—	3	1	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	4	2	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	10	7	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	19	5	1	—	1	—	—	—
15–	1	—	—	—	—	—	—	—	7	6	—	—	—	—	—	—
20–	1	—	—	—	—	—	—	1	8	6	—	—	—	—	—	—
25–	—	1	—	—	—	—	—	—	16	14	—	—	—	—	—	—
30–	—	—	—	—	—	—	—	1	19	12	—	—	—	—	—	—
35–	3	—	—	1	—	—	—	—	29	25	1	—	1	—	—	—
40–	1	1	—	—	—	—	1	1	46	32	—	1	—	—	—	—
45–	1	2	—	—	—	—	—	—	57	38	1	—	4	—	—	—
50–	—	—	—	—	1	—	—	—	64	51	—	—	4	—	—	—
55–	—	1	1	—	—	—	1	—	93	53	4	2	7	1	—	—
60–	1	—	—	—	—	1	—	—	63	49	1	4	5	1	—	—
65–	2	—	1	1	—	—	—	—	46	29	2	—	7	2	2	—
70–	—	1	—	—	—	—	—	1	27	30	6	6	1	1	4	
75–	—	—	—	—	1	2	—	—	15	26	6	8	1	1	1	—
80–	1	—	—	—	—	—	—	1	10	16	2	7	1	1	2	—
85 and over	—	1	—	2	—	1	—	—	8	6	2	3	2	1	2	—

* **213,** Benign neoplasm of breast, —; **217,** Benign neoplasm of other female genital organs, *0, 40, 45, 45, 55, 70, 70, 75*; **21** Benign neoplasm of male genital organs, 60, 60, 80, 80; **220,** Benign melanoma of skin, 1; **221,** Pilonidal cyst, —; **222,** Oth benign neoplasm of skin, 65, 70, 85, *60, 70*; **229,** Benign neoplasm of other and unspecified organs and tissues, 30, 30, 35, 40, 55, 55, 55, 65, 75, 80, 85, 85, *15, 35, 45, 55, 60, 75, 75, 80*; **232,** Neoplasm of unspecified nature of breast, *40, 65, 65, 75*; **23** Neoplasm of unspecified nature of uterus, *70*; **234,** Neoplasm of unspecified nature of ovary, *45, 55, 60, 70*; **235,** Neoplasm unspecified nature of other female genital organs, *35*.

TABLE 3.—(*contd.*)

Causes of death	NEOPLASMS						III									
	237 Unspecified nature of brain and other parts of nervous system		238 Unspecified nature of skin and musculo-skeletal system		239 Unspecified nature of other and unspecified organs		240-289 Allergic Endocrine system, Metabolic, and Nutritional diseases		240–245 Allergic disorders		240* 241 Asthma		242–245* 250–254 Diseases of thyroid gland		250 Simple goitre	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**443**	**340**	**9**	**3**	**32**	**27**	**3112**	**4805**	**1683**	**1426**	**1681**	**1425**	**117**	**761**	**10**	**40**
0–	3	5	1	—	2	—	**42**	**27**	3	4	3	4	2	3	1	—
1–	3	6	—	—	—	—	**6**	**17**	—	5	—	5	—	—	—	—
2–	2	2	—	—	—	—	**7**	**8**	3	3	3	3	—	—	—	—
3–	3	1	—	—	—	—	**4**	**2**	1	—	—	—	—	—	—	—
4–	4	2	—	—	—	—	**3**	**4**	1	3	1	3	—	—	—	—
5–	10	7	—	—	—	—	**12**	**7**	6	1	6	1	—	—	—	—
10–	15	5	—	—	2	—	**13**	**20**	4	4	4	4	1	—	—	—
15–	7	6	—	—	—	—	**30**	**35**	9	13	9	13	—	3	—	—
20–	7	5	1	—	—	1	**40**	**46**	16	17	16	17	2	6	—	—
25–	15	12	—	1	1	1	**33**	**67**	15	20	15	20	2	12	—	—
30–	19	11	—	—	—	1	**43**	**64**	27	29	27	29	—	5	—	—
35–	23	22	—	—	4	1	**68**	**109**	39	58	39	58	6	18	—	1
40–	43	29	2	—	1	1	**111**	**161**	70	96	70	96	8	28	1	—
45–	52	36	—	—	—	1	**172**	**207**	112	95	112	95	9	41	—	2
50–	56	51	1	—	3	—	**259**	**307**	178	138	177	138	17	56	1	3
55–	74	47	—	—	8	2	**312**	**408**	219	161	219	161	11	92	—	3
60–	56	41	—	—	1	2	**398**	**562**	258	165	258	165	19	112	1	8
65–	31	24	2	—	2	1	**476**	**784**	280	191	280	191	14	146	1	3
70–	15	15	—	—	1	5	**497**	**873**	225	192	225	192	14	127	4	8
75–	4	8	1	2	2	6	**348**	**648**	130	133	130	132	10	72	1	7
80–	1	5	—	—	4	3	**177**	**337**	66	72	66	72	1	32	—	3
85 and over	—	—	1	—	1	2	**61**	**112**	21	26	20	26	1	8	—	2

Causes of death	251 Nontoxic nodular goitre		252 Thyro-toxicosis with or without goitre		253 Myxœdema and cretinism		254 Other diseases of thyroid gland		260 Diabetes mellitus		270–277 Diseases of other endocrine glands		270* 271 Diseases of parathyroid gland		272 Diseases of pituitary gland	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**6**	**32**	**77**	**512**	**20**	**158**	**4**	**19**	**1100**	**2338**	**121**	**169**	—	**6**	**29**	**36**
0–	—	—	—	—	1	3	—	—	—	—	31	12	—	—	1	—
1–	—	—	—	—	—	—	—	—	2	—	—	6	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	3	4	1	—	—	—	—	—
10–	1	—	—	—	—	—	—	—	5	14	2	1	—	—	2	—
15–	—	—	—	3	—	—	—	—	17	16	4	2	—	—	—	—
20–	—	—	2	5	—	1	—	—	18	15	4	7	—	—	1	4
25–	—	1	2	8	—	3	—	—	13	23	2	12	—	—	1	2
30–	—	—	—	5	—	—	—	—	8	17	6	9	—	—		2
35–	1	1	5	14	—	—	—	2	17	12	4	19	—	1	1	2
40–	—	1	7	24	—	2	—	1	20	21	8	12	—	—	2	4
45–	1	2	8	32	—	4	—	1	36	45	9	18	—	—	4	5
50–	—	2	11	42	4	7	1	2	49	85	8	24	—	2	4	4
55–	—	3	6	79	3	6	2	1	61	137	11	8	—	2	5	2
60–	—	4	15	72	2	26	1	2	101	263	9	13	—	1	2	2
65–	—	6	9	98	4	36	—	3	164	427	7	10	—	—	1	2
70–	1	4	8	78	1	34	—	3	244	521	5	10	—	—	1	5
75–	1	5	4	37	4	20	—	3	196	432	5	5	—	—	2	2
80–	1	2	—	14	—	13	—	—	106	228	1	1	—	—	—	—
85 and over	—	1	—	1	1	3	—	1	39	76	—	—	—	—	—	—

* **240,** Hay fever, —; **242,** Angioneurotic œdema, 50, 85; **243,** Urticaria, *75*; **244,** Allergic eczema, —; **245,** Other allergic disorders, —; **270,** Disorders of pancreatic internal secretion other than diabetes mellitus, 0, 65, *45, 60, 65, 80.*

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TABLE 3.—(*contd.*)

Causes of death	273 Diseases of thymus glands		274 Diseases of adrenal glands		275, 276* 277 Polyglandular dysfunction and other diseases of endocrine glands		280–289 Avitaminoses, and other metabolic diseases		280, 281* 282 Scurvy		283, 284, 285* 286 Other avitaminoses and nutritional deficiency states		287 Obesity not specified as of endocrine origin		288 Gout	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**23**	**7**	**63**	**102**	**4**	**14**	**91**	**111**	**6**	**1**	**27**	**30**	**4**	**24**	**14**	**4**
0–	17	4	11	8	1	—	6	8	2	—	1	2	—	—	—	—
1–	—	1	—	5	—	—	4	6	1	—	2	5	—	—	—	—
2–	1	—	1	—	—	—	2	4	—	1	1	3	—	—	—	—
3–	—	—	1	—	—	—	1	2	—	—	1	2	—	—	—	—
4–	1	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—
5–	—	—	1	—	—	—	2	2	—	—	—	2	—	—	—	—
10–	—	—	—	1	—	—	1	1	—	—	—	—	—	—	—	—
15–	3	—	—	2	1	—	—	1	—	—	—	—	—	—	—	—
20–	—	—	3	2	—	1	—	1	—	—	—	—	—	—	—	—
25–	—	1	1	7	—	2	1	—	—	—	—	—	—	—	—	—
30–	1	—	3	5	—	2	2	4	—	—	1	—	—	—	—	—
35–	—	—	3	15	—	1	2	2	—	—	1	—	—	—	—	—
40–	—	—	5	7	1	1	5	4	—	—	2	1	—	2	—	—
45–	—	—	5	11	—	1	6	8	—	—	3	3	—	1	—	—
50–	—	—	4	15	—	3	7	4	—	—	2	—	—	1	1	—
55–	—	—	6	4	—	—	10	10	1	—	4	—	—	4	1	1
60–	—	—	6	7	1	2	11	9	—	—	1	3	1	3	3	—
65–	—	—	5	7	—	—	11	10	1	—	2	3	2	5	2	—
70–	—	—	4	5	—	—	9	23	—	—	2	6	—	5	4	—
75–	—	1	3	1	—	1	7	6	1	—	3	—	—	2	1	1
80–	—	—	1	—	—	—	3	4	—	—	—	—	1	1	2	2
85 and over	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—

Causes of death	289 Other metabolic diseases		IV 290-299 Diseases of the Blood and Blood-forming organs		290 Pernicious and other hyperchromic anæmias		290.0 Pernicious anæmia		290.1 Subacute combined degeneration of spinal cord		290.2 Other hyperchromic anæmias		291 Iron deficiency anæmias (hypochromic anæmias)		292 Other anæmias of specified type	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**32**	**34**	**870**	**1475**	**441**	**844**	**409**	**780**	**25**	**43**	**7**	**21**	**35**	**90**	**140**	**185**
0–	1	4	17	10	—	—	—	—	—	—	—	—	—	—	4	3
1–	1	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—
2–	1	—	8	3	—	—	—	—	—	—	—	—	—	—	3	2
3–	—	—	3	5	—	—	—	—	—	—	—	—	—	—	2	2
4–	—	—	2	1	—	—	—	—	—	—	—	—	—	—	1	1
5–	1	—	15	6	—	—	—	—	—	—	—	—	—	—	7	5
10–	1	1	9	8	—	—	—	—	—	—	—	—	—	—	1	—
15–	—	1	13	17	1	—	1	—	—	—	—	—	—	—	3	5
20–	—	1	13	10	1	2	—	2	1	—	—	—	—	1	3	3
25–	1	—	12	18	1	2	1	1	—	—	—	1	—	1	2	7
30–	1	4	11	14	1	—	1	—	—	—	—	—	—	1	2	8
35–	1	1	22	29	2	4	2	4	—	—	—	—	—	2	6	12
40–	3	1	26	30	7	10	6	10	1	—	—	—	—	—	9	6
45–	3	3	25	52	5	22	3	20	2	1	—	1	—	5	8	7
50–	4	1	37	60	10	24	9	20	1	4	—	—	1	5	9	10
55–	4	5	55	106	22	50	20	44	1	3	1	3	2	4	10	15
60–	6	2	76	159	36	84	32	77	3	6	1	1	4	14	17	24
65–	2	1	123	212	69	129	63	120	5	7	1	2	5	16	17	22
70–	2	4	147	266	107	179	96	161	8	13	3	5	8	18	11	24
75–	—	2	143	228	99	171	95	162	3	6	1	3	6	9	20	13
80–	—	1	78	175	57	125	57	119	—	3	—	3	8	11	3	11
85 and	—	1	34	64	23	42	23	40	—	—	—	2	1	3	2	5

* **275,** Ovarian dysfunction, — ; **276,** Testicular dysfunction, — ; **280,** Beriberi, 70, *35, 70* ; **281,** Pellagra, *50, 70* ; **283,** Active rickets, 0, 0, 5, *0, 0, 45, 70* ; **284,** Late effects of rickets, — ; **285,** Osteomalacia, 65, 65, 75, 75, *50, 60, 65, 70, 70, 70, 70, 70, 75, 85*

TABLE 3.—(*contd.*)

Causes of death	292.4 Aplastic anæmia		292.0–3 ; 5–7 Others included under 292		293 Anæmia of unspecified type		294 Polycythæmia		295 Hæmophilia		296 Purpura and other hæmorrhagic conditions		297 Agranulocytosis		298 Diseases of spleen	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**103**	**121**	**37**	**64**	**55**	**110**	**27**	**24**	**18**	—	**62**	**73**	**11**	**26**	**79**	**120**
0–	—	1	4	2	3	1	—	—	3	—	7	6	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	1	2	—	—	—	—
2–	3	2	—	—	1	—	—	—	—	—	3	1	—	—	1	—
3–	1	—	1	2	—	—	—	1	—	—	1	1	—	1	—	—
4–	1	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—
5–	7	4	—	1	—	—	—	—	1	—	4	—	1	—	2	1
10–	1	—	—	—	—	—	—	—	3	—	3	7	1	—	1	1
15–	3	5	—	—	—	1	—	—	4	—	1	4	—	1	4	6
20–	3	1	—	2	1	—	—	—	1	—	4	2	—	—	3	2
25–	2	2	—	5	—	1	—	—	2	—	2	4	—	—	5	3
30–	1	3	1	5	—	2	—	—	—	—	1	—	1	—	6	3
35–	4	7	2	5	—	1	1	—	1	—	1	5	1	1	10	4
40–	7	5	2	1	—	2	—	—	—	—	3	1	—	1	7	10
45–	6	7	2	—	2	4	2	—	—	—	3	2	1	2	3	9
50–	6	4	3	6	1	2	4	4	—	—	4	3	—	3	8	9
55–	6	11	4	4	5	7	6	6	1	—	2	3	—	5	7	16
60–	14	13	3	11	3	11	5	4	1	—	2	2	1	3	6	16
65–	11	15	6	7	8	12	7	3	—	—	8	11	4	5	5	13
70–	9	18	2	6	6	18	2	4	—	—	3	10	—	3	10	10
75–	15	9	5	4	13	20	—	2	—	—	3	4	1	—	1	9
80–	2	9	1	2	6	15	—	—	—	—	4	5	—	1	—	7
85 and over	1	4	1	1	6	13	—	—	—	—	2	—	—	—	—	1

Causes of death	299 Other diseases of blood and blood-forming organs		V 300-326 **Mental, Psychoneurotic and Personality Disorders**		300–309 Psychoses		300 Schizophrenic disorders (dementia præcox)		301 Manic-depressive reaction		302, 303* 304 Senile psychosis		305 Presenile psychosis		307 Alcoholic psychosis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**2**	**3**	**451**	**710**	**329**	**553**	**27**	**33**	**48**	**80**	**214**	**379**	**14**	**19**	**2**	—
0–	—	—	31	34	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	9	9	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	5	8	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	5	3	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	9	8	1	1	—	1	1	—	—	—	—	—	—	—
10–	—	—	3	8	—	—	—	—	—	—	—	—	—	—	—	—
15–	—	—	3	8	2	—	1	—	1	—	—	—	—	—	—	—
20–	—	—	7	7	6	4	6	4	—	—	—	—	—	—	—	—
25–	—	—	17	11	9	6	5	3	3	1	—	—	—	—	—	—
30–	—	—	12	10	7	7	4	5	1	2	—	—	—	—	—	—
35–	—	—	12	12	10	11	5	6	4	4	—	—	—	—	—	—
40–	—	—	15	21	8	14	4	5	2	8	—	—	—	—	1	—
45–	1	1	14	30	10	19	1	3	7	14	—	—	—	—	—	—
50–	—	—	18	33	12	23	—	3	7	12	1	—	—	1	—	—
55–	—	—	23	32	16	22	—	1	8	14	1	—	3	2	1	—
60–	1	1	21	33	18	27	—	1	6	7	3	3	3	10	—	—
65–	—	1	34	75	28	64	—	—	3	10	20	39	4	5	—	—
70–	—	—	56	82	52	77	1	1	2	5	45	70	3	—	—	—
75–	—	—	70	112	69	107	—	—	1	3	67	98	1	1	—	—
80–	—	—	43	95	43	94	—	—	2	—	39	94	—	—	—	—
85 and over	—	—	39	79	38	77	—	—	—	—	38	75	—	—	—	—

* **302,** Involutional melancholia, 55, *50, 50, 50, 55, 55, 60, 60, 65, 65, 75* ; **303,** Paranoia and paranoid states, 30, *50, 55.*

TABLE 3.—(*contd.*)

Causes of death	309 Other and unspecified psychoses		310–318 Psycho-neurotic disorders		310* 311 Hysterical reaction without mention of anxiety reaction		312–317* 318 Psycho-neurotic disorders, other, mixed, and unspecified types		320–326 Disorders of character, behaviour, and intelligence		320, 321* 322 Alcoholism		322.0 Acute		322.1 Chronic	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**22**	**30**	**13**	**34**	**3**	**21**	**6**	**5**	**109**	**123**	**24**	**24**	**8**	**3**	**11**	**21**
0–	—	—	1	—	—	—	—	—	30	34	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	9	9	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	5	8	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	5	3	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—
5–	—	—	—	1	—	—	—	—	8	6	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	3	8	—	—	—	—	—	—
15–	—	—	—	2	—	2	—	—	1	6	—	—	—	—	—	—
20–	—	—	—	2	—	2	—	—	1	1	—	—	—	—	—	—
25–	1	2	1	—	—	—	—	—	7	5	—	—	—	—	—	—
30–	1	—	—	—	—	—	—	—	5	3	2	1	1	—	1	1
35–	1	1	—	1	—	—	—	—	2	—	2	—	1	—	1	—
40–	1	1	1	4	1	3	—	1	6	3	6	—	2	—	3	—
45–	2	2	1	3	1	2	—	—	3	8	2	7	2	1	—	6
50–	4	3	—	4	—	3	—	—	6	6	4	3	1	—	2	3
55–	2	2	3	4	1	1	2	—	4	6	1	3	1	1	—	2
60–	6	4	1	1	—	—	1	—	2	5	2	2	—	—	2	2
65–	1	8	3	6	—	4	2	2	3	5	2	3	—	1	1	2
70–	1	1	2	4	—	2	1	2	2	1	2	1	—	—	1	1
75–	—	4	—	—	—	—	—	—	1	5	1	3	—	—	—	3
80–	2	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—
85 and over	—	2	—	1	—	1	—	—	1	1	—	1	—	—	—	1

Causes of death	322.2 Unspecified		323, 324* 325 Mental deficiency		326* VI 330–398 Diseases of the Nervous System and Sense Organs		330–334 Vascular lesions affecting central nervous system		330 Sub-arachnoid hæmorrhage		331 Cerebral hæmorrhage		332 Cerebral embolism and thrombosis		333* 334 Other and ill-defined vascular lesions affecting central nervous system	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**5**	—	**82**	**98**	**28371**	**37917**	**25270**	**34781**	**536**	**780**	**13289**	**18983**	**10061**	**13398**	**1384**	**1618**
0–	—	—	30	34	**293**	**188**	30	8	2	7	25	—	3	1	—	—
1–	—	—	9	9	**84**	**62**	3	1	—	—	2	1	1	—	—	—
2–	—	—	5	8	**36**	**28**	1	1	—	1	1	—	—	—	—	—
3–	—	—	5	3	**30**	**24**	—	1	—	1	—	—	—	—	—	—
4–	—	—	5	—	**11**	**10**	—	—	—	—	—	—	—	—	—	—
5–	—	—	8	6	**65**	**57**	1	4	—	2	1	2	—	—	—	—
10–	—	—	3	8	**62**	**43**	—	6	—	6	—	—	—	—	—	—
15–	—	—	1	6	**84**	**57**	8	8	7	5	1	2	—	1	—	—
20–	—	—	1	1	**93**	**86**	17	18	11	9	6	8	—	1	—	—
25–	—	—	7	5	**128**	**96**	28	23	8	10	16	10	2	3	2	—
30–	—	—	3	2	**102**	**122**	38	43	13	18	20	18	4	6	1	1
35–	—	—	—	—	**196**	**218**	83	110	27	24	44	72	9	11	3	3
40–	1	—	—	3	**361**	**371**	214	226	44	36	126	143	38	40	6	7
45–	—	—	1	1	**659**	**709**	475	543	75	82	314	390	73	63	13	8
50–	1	—	1	3	**981**	**1265**	806	1091	71	97	563	783	147	190	25	21
55–	—	—	2	3	**1595**	**1917**	1369	1711	63	89	867	1182	398	396	41	44
60–	—	—	—	3	**2793**	**3065**	2526	2800	80	86	1525	1777	809	855	112	82
65–	1	—	1	2	**4132**	**4828**	3821	4502	54	118	2141	2696	1430	1514	196	174
70–	1	—	—	—	**5672**	**7103**	5290	6674	44	90	2778	3735	2212	2557	256	291
75–	1	—	—	1	**5502**	**7789**	5245	7453	24	59	2553	3915	2310	3102	358	377
80–	—	—	—	—	**3650**	**5779**	3521	5585	10	25	1582	2567	1699	2654	230	338
85 and over	—	—	—	—	**1842**	**4100**	1794	3973	3	15	724	1682	926	2004	141	272

* **310**, Anxiety reaction without mention of somatic symptons, 70, *45* ; **312**, Phobic reaction, — ; **313**, Obsessive-compulsiv reaction, 25, *35*, *55*, *55* ; **314**, Neurotic-depressive reaction, *55*, *60* ; **315**, Psychoneurosis with somatic symptoms (somatizatio reaction) affecting circulatory system, — ; **316**, Psychoneurosis with somatic symptoms (somatization reaction) affecting digestiv system, 0, *5*, *50* ; **317**, Psychoneurosis with somatic symptoms (somatization reactions) affecting other systems, 65 ; **323**, Othe drug addiction, 50, 55, 85, *75* ; **324**, Primary childhood behaviour disorders, — ; **326**, Other and unspecified character, behaviou and intelligence disorders, — ; **333**, Spasm of cerebral arteries, *70*, *80*.

TABLE 3.—(*contd.*)

Causes of death	340–345 Inflammatory diseases of central nervous system		340 Meningitis, except meningococcal and tuberculous		340.0 H. influenzæ		340.1 Pneumococcus		340.2 Due to other specified organism		340.3 Unspecified cause		341 Phlebitis and thrombophlebitis of intracranial venous sinuses		342 Intracranial and intraspinal abscess		343 Encephalitis, myelitis and encephalomyelitis (except acute infectious)	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**801**	**770**	**276**	**204**	**38**	**27**	**106**	**87**	**35**	**22**	**97**	**68**	**5**	**2**	**77**	**38**	**100**	**103**
0–	116	89	97	75	19	16	34	28	17	11	27	20	2	1	2	2	10	8
1–	45	38	34	22	9	6	15	9	1	—	9	7	—	—	2	—	7	9
2–	16	17	9	7	2	2	3	3	—	—	4	2	—	—	1	—	5	7
3–	10	11	6	8	1	1	2	3	1	—	2	4	—	—	1	1	2	2
4–	7	1	2	1	—	—	1	—	—	1	1	—	—	—	—	—	3	—
5–	26	22	17	14	2	1	5	6	2	2	8	5	—	—	1	2	2	3
10–	17	11	9	4	—	—	4	2	1	—	4	2	—	—	3	1	4	4
15–	17	14	5	2	—	—	—	1	—	1	5	—	—	—	5	5	3	5
20–	15	18	5	6	—	1	1	—	—	2	4	3	—	—	5	3	—	4
25–	29	25	8	4	—	—	1	1	2	—	5	3	—	—	8	2	2	5
30–	27	30	5	8	—	—	4	3	1	1	—	4	—	—	3	3	1	3
35–	46	38	12	5	2	—	4	3	3	—	3	2	1	—	6	2	4	3
40–	65	73	7	10	—	—	2	3	—	1	5	6	—	—	8	3	4	6
45–	73	79	10	3	1	—	7	2	—	—	2	1	—	—	5	2	6	8
50–	66	76	8	10	1	—	6	7	—	1	1	2	—	—	8	3	12	4
55–	71	55	19	6	—	—	10	3	4	—	5	3	—	1	7	—	5	4
60–	55	67	7	3	—	—	3	1	1	1	3	1	—	—	5	4	10	6
65–	42	44	6	9	1	—	1	8	—	—	4	1	—	—	2	2	7	5
70–	35	44	6	7	—	—	2	4	1	1	3	2	1	—	2	1	8	9
75–	16	9	3	—	—	—	1	—	—	—	2	—	1	—	—	1	3	2
80–	5	3	1	—	—	—	—	—	1	—	—	—	—	—	—	1	2	2
85 and over	2	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4

Causes of death	344 Late effects of intracranial abscess or pyogenic infection		345 Multiple sclerosis		350–357 Other diseases of central nervous system		350 Paralysis agitans		351 Cerebral spastic infantile paralysis		352 Other cerebral paralysis		353 Epilepsy		354* 355 Other diseases of brain	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**24**	**19**	**319**	**404**	**1879**	**2074**	**614**	**803**	**53**	**33**	**269**	**420**	**483**	**440**	**87**	**102**
0–	5	3	—	—	20	12	—	—	4	1	1	—	12	7	1	2
1–	2	7	—	—	11	6	—	—	3	1	1	—	6	5	1	—
2–	1	3	—	—	13	9	—	—	3	1	1	—	8	7	—	1
3–	1	—	—	—	14	9	—	—	1	—	—	1	11	7	1	1
4–	2	—	—	—	3	7	—	—	—	2	—	1	3	3	—	1
5–	3	3	—	—	32	20	1	—	4	5	—	1	26	13	1	1
10–	1	2	—	—	35	16	—	—	6	—	—	1	23	12	3	3
15–	3	—	1	2	49	28	—	—	5	4	2	2	38	20	1	—
20–	1	—	4	5	41	40	—	—	1	—	—	—	33	39	1	—
25–	2	1	9	13	51	37	—	—	2	—	—	1	45	32	1	1
30–	—	—	18	16	31	39	—	1	1	2	—	1	24	33	1	1
35–	—	—	23	28	46	59	2	2	—	3	—	3	35	37	3	4
40–	—	—	46	54	59	60	3	8	—	1	2	1	35	38	4	4
45–	—	—	52	66	86	75	7	8	2	2	1	4	44	45	2	2
50–	1	—	37	59	88	85	13	12	2	—	7	13	25	35	5	3
55–	—	—	40	44	129	138	39	40	1	1	16	15	29	24	5	7
60–	1	—	32	54	192	183	70	82	8	2	21	28	21	23	6	7
65–	—	—	27	28	253	271	122	156	2	2	41	41	23	21	9	4
70–	—	—	18	27	331	364	155	216	5	5	65	76	24	12	14	16
75–	1	—	8	6	233	317	131	160	1	—	57	101	10	17	13	14
80–	—	—	2	—	118	182	53	82	1	1	37	69	6	6	10	18
85 and over	—	—	2	2	44	117	18	36	1	—	17	61	2	4	5	12

* **354,** Migraine, 50, 60.

TABLE 3.—(*contd.*)

Causes of death	356 Motor neurone disease and muscular atrophy		356.0 Progressive muscular atrophy		356.1 Amyotrophic lateral sclerosis		356.2 ; 3 Others included under 356		357 Other diseases of spinal cord		360–369 Diseases of nerves and peripheral ganglia		360* 361 Trigeminal neuralgia		362, 363* 364 Polyneuritis and polyradiculitis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**335**	**251**	**254**	**184**	**64**	**50**	**17**	**17**	**36**	**25**	**91**	**81**	**4**	**4**	**42**	**22**
0–	1	2	—	1	—	—	1	1	1	—	25	23	—	—	—	1
1–	—	—	—	—	—	—	—	—	—	—	10	8	—	—	—	—
2–	1	—	—	—	—	—	1	—	—	—	2	—	—	—	1	—
3–	1	—	—	—	—	—	1	—	—	—	2	—	—	—	1	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	—	—	1	1	—	—	1	1
10–	3	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—
15–	3	1	2	1	—	—	1	—	—	1	—	—	—	—	—	—
20–	4	—	4	—	—	—	—	—	2	1	2	2	—	—	2	1
25–	2	2	2	2	—	—	—	—	1	1	1	2	1	—	—	2
30–	3	1	3	1	—	—	—	—	2	—	—	3	—	—	—	1
35–	4	8	4	6	—	1	—	1	2	2	5	3	—	—	5	3
40–	14	6	10	5	4	1	—	—	1	2	4	3	—	—	3	1
45–	24	12	17	8	4	3	3	1	6	2	5	—	—	—	5	—
50–	32	20	24	13	7	6	1	1	3	2	5	3	—	—	4	1
55–	36	49	27	37	7	10	2	2	3	2	10	4	—	—	10	3
60–	60	36	41	30	14	4	5	2	5	5	6	5	—	—	3	2
65–	51	45	39	29	12	10	—	6	5	2	4	5	2	—	2	1
70–	64	39	51	27	12	10	1	2	4	—	5	10	1	3	4	2
75–	21	23	17	17	3	5	1	1	—	2	2	3	—	1	—	1
80–	10	3	9	3	1	—	—	—	1	3	1	4	—	—	1	1
85 and over	1	4	1	4	—	—	—	—	—	—	1	2	—	—	—	1

Causes of death	365 Erythrœdema polyneuritica		366 Other and unspecified forms of neuralgia and neuritis		367–369* 370–379 Inflammatory diseases of eye		370–379* 380–389 Other diseases and conditions of eye		380–384* 385 Cataract		386* 387 Glaucoma		388, 389* 390–398 Diseases of ear and mastoid process		390* 391 Otitis media without mention of mastoiditis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**36**	**30**	**6**	**12**	**10**	**16**	**9**	**14**	**1**	**8**	**2**	**5**	**311**	**181**	**229**	**129**
0–	25	22	—	—	3	4	—	—	—	—	—	—	99	52	77	37
1–	10	8	—	—	—	1	—	—	—	—	—	—	15	8	11	7
2–	1	—	—	—	—	—	—	—	—	—	—	—	4	1	2	1
3–	—	—	—	—	—	2	—	—	—	—	—	—	4	1	3	1
4–	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	1
5–	—	—	—	—	—	—	1	—	—	—	—	—	4	10	2	9
10–	—	—	—	—	—	—	—	—	—	—	—	—	10	10	5	7
15–	—	—	—	—	—	—	—	—	—	—	—	—	10	7	6	3
20–	—	—	—	—	—	1	—	—	—	—	—	—	18	7	16	3
25–	—	—	—	—	2	—	—	—	—	—	—	—	17	9	9	5
30–	—	—	—	1	—	—	—	—	—	—	—	—	6	7	4	5
35–	—	—	—	—	—	1	—	—	—	—	—	—	16	7	13	4
40–	—	—	—	1	—	—	—	—	—	—	—	—	19	9	13	8
45–	—	—	—	—	—	—	—	—	—	—	—	—	20	12	16	9
50–	—	—	1	2	1	1	2	—	—	—	—	—	13	9	10	8
55–	—	—	—	1	2	1	—	1	—	—	—	1	14	7	7	5
60–	—	—	3	1	—	—	2	2	—	1	—	1	12	8	10	5
65–	—	—	—	3	—	—	—	1	—	1	—	—	12	5	12	2
70–	—	—	—	1	—	—	2	6	—	2	2	3	9	5	5	5
75–	—	—	1	1	—	3	—	2	—	2	—	—	6	2	5	2
80–	—	—	—	—	1	1	2	2	1	2	—	—	2	2	2	1
85 and over	—	—	1	1	1	1	—	—	—	—	—	—	—	1	—	1

* **360,** Facial paralysis, *60, 60, 70, 80* ; **362,** Brachial neuritis, — ; **363,** Sciatica, 40, 75, *30, 40, 70, 70, 80, 80* ; **367,** Other disease of cranial nerves, *65* ; **368,** Other diseases of peripheral nerves except autonomic, *70* ; **369,** Diseases of peripheral autonomic nervous system, 3, *20* ; **370,** Conjunctivitis and ophthalmia, 0, 80, *0, 0* ; **371,** Blepharitis, *0* ; **372,** Hordeolum (stye), — ; **373,** Iritis, *75* ; **374,** Keratitis, *35* ; **375,** Choroiditis, — ; **376,** Other inflammation of uveal tract, 0, 25, 50, 55, *75* ; **377,** Inflammation of optic nerve and retina, 85 ; **378,** Inflammation of lachrymal glands and ducts, 0, *0, 1, 55* ; **379,** Other inflammatory diseases of eye, *25, 55, 3, 3, 20, 50, 75, 80, 85* ; **380,** Refractive errors, — ; **381,** Corneal ulcer, 50, 60 ; **382,** Corneal opacity, — ; **383,** Pterygium, — ; **384,** Strabismus, 5 ; **386,** Detachment of retina, — ; **388,** Other diseases of eye, 50, *70* ; **389,** Blindness, 60, 80 ; **390,** Otitis externa —.

TABLE 3.—(*contd.*)

Causes of death	392 Otitis media with mastoiditis		393 Mastoiditis without mention of otitis media		394, 395* 396 Other diseases of ear and mastoid process		397, 398* VII 400–468 Diseases of the Circulatory System		400–402 Rheumatic fever		400 Rheumatic fever without mention of heart involvement		401 Rheumatic fever with heart involvement		401.0 Active rheumatic pericarditis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**18**	**8**	**56**	**42**	**4**	**2**	**89013**	**91608**	**312**	**391**	**24**	**23**	**284**	**355**	**60**	**39**
0–	5	—	16	14	—	1	23	11	2	2	—	—	2	2	2	—
1–	1	—	3	1	—	—	4	5	—	1	—	—	—	1	—	—
2–	—	—	2	—	—	—	7	4	2	1	—	—	2	1	—	—
3–	—	—	1	—	—	—	7	4	2	1	—	1	2	—	—	—
4–	—	1	—	—	—	—	7	8	3	1	—	—	3	1	—	—
5–	2	1	—	—	—	—	47	60	26	27	4	5	22	22	5	4
10–	—	—	5	3	—	—	95	112	35	57	1	7	34	49	10	9
15–	—	—	4	4	—	—	127	109	25	16	2	2	23	13	2	1
20–	—	1	1	3	1	—	162	173	10	12	—	—	10	11	3	—
25–	1	1	6	3	—	—	263	299	14	13	1	1	12	11	2	1
30–	1	1	1	1	—	—	313	355	14	14	3	—	11	11	1	—
35–	2	—	1	3	—	—	646	608	10	19	3	1	7	16	1	1
40–	2	1	4	—	—	—	1222	914	14	16	1	—	11	16	1	1
45–	1	2	2	1	1	—	2392	1358	27	21	—	1	27	20	9	3
50–	1	—	2	1	—	—	3567	2188	18	40	1	3	17	37	4	2
55–	1	—	4	1	2	1	5815	3422	20	26	3	—	17	26	4	4
60–	—	—	2	3	—	—	9200	5938	28	32	2	1	25	31	3	6
65–	—	—	—	3	—	—	12363	9780	26	32	2	—	24	31	6	2
70–	1	—	1	—	—	—	16067	15387	15	27	—	—	15	25	3	3
75–	—	—	1	—	—	—	16432	18640	16	15	1	—	15	14	3	—
80–	—	—	—	1	—	—	12259	16747	4	13	—	1	4	12	1	1
85 and over	—	—	—	—	—	—	7995	15486	1	5	—	—	1	5	—	1

Causes of death	401.1 Active rheumatic endocarditis		401.2 Active rheumatic myocarditis		401.3 Active rheumatic fever with other and multiple types of heart involvement		402 Chorea		402.0 Without mention of heart involvement		402.1 With heart involvement		410–416 Chronic rheumatic heart disease		410 Diseases of mitral valve	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**67**	**80**	**11**	**26**	**146**	**210**	**4**	**13**	**1**	**7**	**3**	**6**	**3733**	**6075**	**2726**	**4815**
0–	—	—	—	—	—	2	—	—	—	—	—	—	2	—	1	—
1–	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—
2–	1	—	—	1	1	—	—	—	—	—	—	—	3	—	2	—
3–	—	—	—	—	2	—	—	—	—	—	—	—	1	3	—	—
4–	2	—	—	—	1	1	—	—	—	—	—	—				
5–	6	8	1	1	10	9	—	—	—	—	—	—	14	22	4	12
10–	8	13	2	2	14	25	—	1	—	—	—	1	35	40	15	29
15–	12	4	2	2	7	6	—	1	—	—	—	1	53	60	30	38
20–	2	6	1	—	4	5	—	1	—	1	—	—	89	104	57	71
25–	7	5	—	—	3	5	1	1	1	1	—	—	119	173	81	137
30–	3	3	—	2	7	6	—	3	—	1	—	2	111	214	79	169
35–	4	5	—	3	2	7	—	2	—	2	—	—	188	332	123	248
40–	2	7	—	2	8	6	2	—	—	—	2	—	255	421	174	324
45–	6	6	1	—	11	11	—	—	—	—	—	—	282	465	205	364
50–	1	3	—	2	12	30	—	—	—	—	—	—	275	513	193	398
55–	2	5	1	—	10	17	—	—	—	—	—	—	360	555	254	450
60–	4	6	2	3	16	16	1	—	—	—	1	—	401	591	301	465
65–	2	2	—	2	16	25	—	1	—	—	—	1	469	644	352	536
70–	2	4	—	2	10	16	—	2	—	2	—	—	452	715	344	587
75–	1	1	1	2	10	11	—	1	—	—	—	1	364	636	295	502
80–	2	1	—	2	1	8	—	—	—	—	—	—	178	392	143	318
85 and over	—	—	—	—	1	4	—	—	—	—	—	—	82	194	73	167

* **394,** Other inflammatory diseases of ear, 0, 25 ; **395,** Ménière's disease, 70, 70 ; **397,** Deaf mutism, — ; **398,** Other deafness, —.

TABLE 3.—(*contd.*)

Causes of death	411 Diseases of aortic valve specified as rheumatic		412 Diseases of tricuspid valve		413* 414 Other endocarditis specified as rheumatic		415 Other myocarditis specified as rheumatic		416 Other heart disease specified as rheumatic		420–422 Arterio-sclerotic and degenerative heart disease		420 Arterio-sclerotic heart disease, including coronary disease		420.0 Arterio-sclerotic heart disease so described	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**198**	**114**	**6**	**4**	**419**	**629**	**174**	**256**	**210**	**257**	**67769**	**66014**	**29902**	**17226**	**99**	**74**
0–	—	—	—	—	1	—	—	—	—	—	3	—	1	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—
3–	—	—	—	—	—	—	—	—	1	—	—	2	—	—	—	—
4–	—	—	—	—	1	2	—	—	—	1	—	—	—	—	—	—
5–	—	—	—	—	9	7	—	1	1	2	2	5	—	1	—	—
10–	1	1	—	—	13	5	—	3	6	2	8	2	1	—	—	—
15–	5	2	—	—	14	17	2	2	2	1	22	9	2	—	—	—
20–	4	3	—	1	18	17	1	4	9	8	22	14	7	2	—	—
25–	9	1	—	1	21	23	3	5	5	6	59	40	28	5	—	—
30–	3	8	—	—	20	21	4	7	5	9	104	47	62	8	—	—
35–	11	1	1	—	33	54	10	13	10	16	297	120	199	36	—	—
40–	13	4	2	1	33	58	13	14	20	20	713	212	585	80	1	—
45–	14	7	—	—	29	56	9	14	25	24	1634	507	1299	232	1	—
50–	17	8	—	—	31	56	15	16	19	35	2594	1043	2010	481	2	—
55–	27	12	2	—	38	46	16	18	23	29	4334	1918	3199	978	3	2
60–	20	15	—	—	44	61	19	24	17	26	7047	3777	4570	1897	16	7
65–	28	10	—	—	40	54	22	26	27	18	9397	6932	5301	3099	17	5
70–	25	14	—	1	41	66	24	26	18	21	12497	11292	5596	3848	15	14
75–	11	16	1	—	23	47	21	47	13	24	12841	14210	4162	3409	20	13
80–	7	7	—	—	8	30	12	26	8	11	9693	13190	2056	2020	17	17
85 and over	3	5	—	—	2	9	3	10	1	3	6501	12692	824	1130	7	16

Causes of death	420.1 Heart disease specified as involving coronary arteries		420.2 Angina pectoris without mention of coronary disease		421 Chronic endocarditis not specified as rheumatic		421.0 of mitral valve specified as non-rheumatic		421.1 of aortic valve not specified as rheumatic		421.2; 3* 421.4 Other and ill-defined, not specified as rheumatic		422 Other myocardial degeneration		422.0 Fatty degeneration	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**28574**	**16462**	**1229**	**690**	**2313**	**2142**	**6**	**7**	**1028**	**555**	**1278**	**1580**	**35554**	**46646**	**225**	**470**
0–	1	—	—	—	2	—	—	—	—	—	2	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	1	—	—	1	2	—	—	1	—	—	2	1	2	—	—
10–	1	—	—	—	4	—	—	—	1	—	3	—	3	2	—	—
15–	2	—	—	—	13	4	1	—	2	—	10	4	7	5	1	—
20–	7	2	—	—	9	5	—	—	4	—	5	5	6	7	1	—
25–	28	5	—	—	12	19	—	1	6	4	6	14	19	16	2	1
30–	62	7	—	1	23	15	1	—	14	5	8	10	19	24	3	2
35–	196	35	3	1	38	34	—	—	22	7	16	27	60	50	3	6
40–	576	76	8	4	44	34	—	1	23	6	21	27	84	98	5	10
45–	1260	223	38	9	113	75	—	—	61	13	52	62	222	200	12	23
50–	1947	458	61	23	146	124	—	—	84	43	61	81	438	438	14	39
55–	3055	933	141	43	229	145	—	—	121	39	108	106	906	795	16	49
60–	4360	1805	194	85	327	218	1	—	152	64	174	154	2150	1662	48	70
65–	5045	2975	239	119	348	309	3	—	164	84	181	225	3748	3524	38	88
70–	5334	3677	247	157	436	364	—	1	178	87	258	276	6465	7080	24	75
75–	3957	3258	185	138	326	369	—	1	125	89	201	279	8353	10432	37	54
80–	1955	1925	84	78	172	261	—	2	55	66	117	193	7465	10909	16	30
85 and over	788	1082	29	32	70	164	—	1	15	48	55	115	5607	11398	5	23

* **413,** Diseases of pulmonary valve specified as rheumatic, —; **421.2,** Of tricuspid valve, specified as non-rheumatic, — ; **421.3,** O pulmonary valve, not specified as rheumatic, 50.

TABLE 3.—(*contd.*)

Causes of death	422.1 With arterio-sclerosis		422.2 Other diseases included under 422		430–434 Other diseases of heart		430 Acute and subacute endocarditis		431 Acute myocarditis not specified as rheumatic		432 Acute pericarditis specified as non-rheumatic		433 Functional disease of heart		434 Other and unspecified diseases of heart	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**12030**	**14545**	**23299**	**31631**	**2443**	**2974**	**255**	**215**	**96**	**128**	**19**	**25**	**1130**	**1733**	**943**	**873**
0–	—	—	—	—	6	3	3	1	—	1	1	1	—	—	2	—
1–	—	—	—	1	3	2	2	1	1	—	—	1	—	—	—	—
2–	—	—	1	1	4	1	1	—	—	—	1	1	—	—	2	—
3–	—	—	—	2	1	1	1	1	—	—	—	—	—	—	—	—
4–	—	—	—	—	1	2	—	2	—	—	—	—	—	—	1	—
5–	1	—	—	2	3	4	1	2	—	—	1	—	—	—	1	2
10–	—	—	3	2	8	7	6	3	1	2	—	—	—	—	1	2
15–	—	—	6	5	17	13	10	12	1	—	—	1	—	—	6	—
20–	—	—	5	7	17	22	11	18	1	1	—	1	1	—	4	2
25–	—	—	17	15	28	35	23	21	—	6	1	—	2	2	2	6
30–	2	—	14	22	31	29	22	13	1	3	—	1	1	4	7	8
35–	1	2	56	42	52	39	24	19	4	3	—	1	8	9	16	7
40–	11	5	68	83	68	68	30	21	5	8	—	1	13	26	20	12
45–	24	29	186	148	77	81	26	17	4	3	—	3	17	37	30	21
50–	88	71	336	328	126	116	19	12	10	7	—	2	34	56	63	39
55–	206	180	684	566	172	175	25	21	6	6	2	2	57	103	82	43
60–	630	463	1472	1129	287	260	26	18	11	15	4	—	128	142	118	85
65–	1282	1117	2428	2319	346	354	16	12	13	16	4	4	192	194	121	128
70–	2365	2342	4076	4663	438	513	5	11	15	16	2	3	236	339	180	144
75–	3016	3482	5300	6896	378	539	4	7	10	19	2	2	222	353	140	158
80–	2570	3408	4879	7471	266	403	—	2	9	10	—	—	158	273	99	118
85 and over	1834	3446	3768	7929	114	307	—	1	4	12	1	1	61	195	48	98

Causes of death	440–447 Hypertensive disease		440 Essential benign hypertension with heart disease		441 Essential malignant hypertension with heart disease		442 Hypertensive heart disease with arteriolar nephro-sclerosis		443 Other and unspecified hypertensive heart disease		444 Essential benign hypertension without mention of heart		445 Essential malignant hypertension without mention of heart		446 Hypertension with arteriolar nephro-sclerosis without mention of heart	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**8011**	**8746**	**9**	**13**	**32**	**32**	**282**	**305**	**3843**	**4310**	**2021**	**2290**	**310**	**223**	**629**	**638**
0–	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	2	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1
10–	4	2	—	—	—	—	—	—	—	—	2	—	—	1	—	—
15–	2	6	—	—	—	—	—	—	1	—	—	—	—	4	—	2
20–	10	8	—	—	1	—	—	—	—	—	2	2	4	4	—	1
25–	20	12	—	—	—	—	—	—	3	2	5	1	9	7	2	—
30–	31	21	—	—	—	1	3	—	3	1	3	6	16	9	4	2
35–	56	52	—	—	2	4	1	2	12	7	9	9	24	25	2	—
40–	112	104	—	—	2	6	1	2	28	30	23	22	39	29	8	6
45–	244	173	—	—	7	4	4	5	78	57	57	51	67	35	14	8
50–	378	327	1	2	4	3	8	3	131	134	129	93	51	45	26	18
55–	664	520	—	3	4	1	24	14	322	237	180	176	50	23	23	28
60–	967	862	2	1	4	5	28	21	506	451	259	242	22	14	52	53
65–	1350	1204	—	1	2	1	48	40	695	634	364	324	13	10	85	68
70–	1492	1740	4	2	4	6	51	66	795	929	354	431	4	8	118	120
75–	1421	1757	1	2	—	—	58	60	707	932	328	418	8	2	123	137
80–	867	1217	1	1	2	1	31	43	400	575	224	325	2	7	108	112
85 and over	391	739	—	1	—	—	25	49	162	321	82	190	—	—	64	81

TABLE 3.—(*contd.*)

Causes of death	447 Other hypertensive disease without mention of heart		450–456 Diseases of arteries		450 General arterio-sclerosis		450.0 Without mention of gangrene		450.1 With gangrene		451 Aortic aneurysm specified as nonsyphilitic, and dissecting aneurysm		452 Other aneurysm, except of heart and aorta		453 Peripheral vascular disease	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**885**	**935**	**6040**	**6360**	**5325**	**5617**	**4794**	**5209**	**531**	**408**	**173**	**189**	**182**	**214**	**60**	**26**
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
5–	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
10–	2	1	5	4	—	—	—	—	—	—	1	—	3	2	—	1
15–	1	—	4	4	—	—	—	—	—	—	—	—	3	3	—	—
20–	3	1	8	9	—	—	—	—	—	—	—	—	5	4	—	—
25–	1	2	13	16	1	1	1	1	—	—	—	—	10	9	—	—
30–	2	2	14	15	1	2	1	2	—	—	2	2	8	5	—	—
35–	6	5	23	25	5	4	5	4	—	—	3	—	8	11	2	1
40–	11	9	38	42	7	5	7	4	—	1	2	8	17	20	5	1
45–	17	13	77	53	23	9	23	9	—	—	6	11	29	22	9	1
50–	28	29	111	69	56	27	55	26	1	1	11	4	17	30	9	2
55–	61	38	189	113	126	58	117	55	9	3	20	18	25	27	7	1
60–	94	75	372	256	302	191	276	181	26	10	28	18	16	29	9	4
65–	143	126	663	462	580	382	523	355	57	27	36	28	11	24	5	2
70–	162	178	1077	941	987	851	885	804	102	47	27	39	17	14	7	4
75–	196	206	1344	1366	1243	1271	1098	1162	145	109	24	27	8	6	3	3
80–	99	153	1212	1469	1148	1376	1021	1268	127	108	10	25	5	4	3	4
85 and over	58	97	888	1514	846	1440	782	1338	64	102	3	9	—	4	1	2

Causes of death	453.0 Raynaud's disease		453.1 Thrombo-angiitis obliterans		453.2 ; 3 Others included under 453		454 Arterial embolism and thrombosis		455 Gangrene of unspecified cause		456 Other diseases of arteries		460–468 Diseases of veins and other diseases of circulatory system		460 Varicose veins of lower extremities	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**4**	**10**	**55**	**14**	**1**	**2**	**18**	**34**	**206**	**203**	**76**	**77**	**705**	**1048**	**73**	**212**
0–	—	—	—	—	—	—	—	—	—	—	—	—	10	5	—	—
1–	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	1	1	1	1	—	—
5–	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
10–	—	—	—	—	—	1	—	—	—	—	1	1	—	—	—	—
15–	—	—	—	—	—	—	—	—	—	—	1	1	4	1	—	1
20–	—	—	—	—	—	—	1	—	—	—	2	5	6	4	—	—
25–	—	—	—	—	—	—	—	—	—	—	2	6	10	10	2	—
30–	—	—	—	—	—	—	—	—	—	1	3	5	8	15	1	1
35–	—	1	2	—	—	—	—	2	2	—	3	7	20	21	5	2
40–	—	1	5	—	—	—	1	—	—	1	6	7	22	51	1	9
45–	1	—	8	1	—	—	—	1	1	2	9	7	51	58	5	9
50–	—	1	9	1	—	—	2	2	3	—	13	4	65	80	7	15
55–	—	1	6	—	1	—	—	1	3	3	8	5	76	115	5	18
60–	2	2	7	2	—	—	1	4	7	6	9	4	98	160	8	38
65–	—	1	5	1	—	—	3	7	21	14	7	5	112	152	8	29
70–	—	1	7	3	—	—	3	3	31	22	5	8	96	159	10	42
75–	—	—	3	2	—	1	3	8	60	49	3	2	68	117	11	23
80–	—	2	3	2	—	—	3	3	41	55	2	2	39	63	6	26
85 and over	1	—	—	2	—	—	1	3	36	50	1	6	18	35	4	3

TABLE 3.—(*contd.*)

Causes of death	461 Hæmorrhoids		462 Varicose veins of other specified sites		463 Phlebitis and thrombo-phlebitis of lower extremities		464 Phlebitis and thrombo-phlebitis of other sites		465 Pulmonary embolism and infarction		466 Other venous embolism and thrombosis		467 Other diseases of circulatory system		468 Certain diseases of lymph nodes and lymph channels	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**15**	**16**	**23**	**23**	**87**	**160**	**55**	**81**	**284**	**312**	**142**	**209**	**12**	**18**	**14**	**17**
0–	—	—	—	—	—	—	1	—	1	—	2	1	1	1	5	3
1–	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
4–	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
5–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15–	—	—	—	—	1	—	—	—	1	—	—	—	—	—	2	—
20–	—	—	—	—	—	—	—	1	2	1	3	2	—	—	1	—
25–	—	—	—	—	—	1	1	1	5	6	1	2	—	—	1	—
30–	—	—	—	—	1	2	1	3	4	8	1	1	—	—	—	—
35–	—	—	—	—	2	4	1	1	7	9	3	5	—	—	2	—
40–	—	1	2	—	1	12	1	2	9	19	7	8	1	—	—	—
45–	—	1	2	—	8	9	3	5	27	18	5	13	—	2	1	1
50–	3	—	3	—	9	17	5	6	30	22	6	17	1	3	1	—
55–	1	1	1	5	10	16	6	10	26	45	24	19	3	1	—	—
60–	—	1	6	1	12	26	10	16	39	47	22	30	1	3	—	3
65–	3	3	3	7	17	24	11	6	43	52	25	28	2	2	—	1
70–	5	4	2	2	13	17	5	16	47	33	12	37	1	4	1	4
75–	2	2	1	7	9	20	5	9	22	28	17	24	1	1	—	1
80–	1	2	2	—	3	9	3	1	14	15	9	14	1	—	—	2
85 and over	—	1	1	1	1	3	1	4	7	9	4	7	—	1	—	1

Causes of death	VIII 470-527 **Diseases of the Respiratory System**		470–475 Acute upper respiratory infection		470 Acute naso-pharyngitis (common cold)		471 Acute sinusitis		472 Acute pharyngitis		473 Acute tonsillitis		474 Acute laryngitis and tracheitis		475 Acute upper respiratory infection of multiple or unspecified sites	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**33823**	**25598**	**102**	**75**	**6**	**7**	**8**	**3**	**9**	**10**	**32**	**30**	**39**	**18**	**8**	**7**
0–	2188	1656	19	10	3	1	—	1	1	—	1	1	9	2	5	5
1–	318	249	17	7	—	1	—	—	1	1	1	1	14	4	1	—
2–	123	103	8	1	—	—	—	—	2	—	—	—	6	1	—	—
3–	58	62	4	2	—	—	—	—	—	—	2	—	2	1	—	1
4–	38	32	2	1	—	—	—	—	1	—	—	1	1	—	—	—
5–	83	75	5	5	—	—	1	—	—	1	4	3	—	1	—	—
10–	40	61	1	1	—	—	—	—	—	—	—	1	—	—	1	—
15–	97	71	—	1	—	—	—	—	—	—	—	1	—	—	—	—
20–	113	109	5	1	—	—	2	—	—	1	3	—	—	—	—	—
25–	146	143	3	4	—	—	1	—	—	1	2	2	—	1	—	—
30–	180	157	3	1	—	—	—	—	1	—	2	1	—	—	—	—
35–	288	260	5	2	—	—	1	—	—	1	3	1	1	—	—	—
40–	566	323	3	2	—	—	2	—	—	—	1	2	—	—	—	—
45–	1070	454	2	4	—	—	—	1	—	—	2	2	—	1	—	—
50–	1753	657	4	4	—	1	—	—	—	—	3	3	1	—	—	—
55–	2842	1015	2	3	—	—	—	—	1	—	1	2	—	1	—	—
60–	4121	1707	4	2	—	—	—	—	1	1	2	1	1	—	—	—
65–	4807	2602	—	5	—	1	—	1	—	—	—	2	—	—	—	1
70–	5139	3909	3	4	—	—	—	—	—	1	2	1	1	2	—	—
75–	4679	4369	9	4	3	—	1	—	1	1	2	2	1	1	1	—
80–	3097	3951	2	5	—	2	—	—	—	1	1	2	1	—	—	—
85 and over	2077	3633	1	6	—	1	—	—	—	1	—	1	1	3	—	—

TABLE 3.—(*contd.*)

Causes of death	480–483 Influenza		480 Influenza with pneumonia		481 Influenza with other respiratory manifestations, and influenza unqualified		482 Influenza with digestive manifestations, but without respiratory symptoms		483 Influenza with nervous manifestations, but without digestive or respiratory symptoms		490–493 Pneumonia		490 Lobar pneumonia		491 Broncho-pneumonia	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**2630**	**2962**	**1209**	**1282**	**1387**	**1634**	**24**	**38**	**10**	**8**	**10496**	**9636**	**2399**	**1773**	**7255**	**7135**
0–	72	43	44	29	25	12	1	1	2	1	1780	1374	155	108	1535	1167
1–	12	11	7	8	5	3	—	—	—	—	246	207	20	15	211	178
2–	7	8	6	7	1	1	—	—	—	—	88	73	10	9	65	57
3–	3	5	2	2	1	2	—	1	—	—	39	43	5	9	31	32
4–	1	2	1	1	—	1	—	—	—	—	29	21	10	2	17	16
5–	7	7	6	4	1	3	—	—	—	—	45	37	14	6	28	29
10–	10	8	7	7	2	—	—	1	1	—	23	34	6	8	15	24
15–	14	15	9	9	4	6	—	—	1	—	56	34	15	13	34	16
20–	10	25	8	14	2	11	—	—	—	—	44	40	9	13	30	22
25–	22	21	12	15	8	5	—	—	2	1	57	81	23	20	30	54
30–	29	28	14	22	15	6	—	—	—	—	78	77	27	31	39	40
35–	37	47	27	30	9	16	1	—	—	1	118	131	43	50	61	61
40–	73	57	44	35	28	21	1	1	—	—	186	131	68	40	102	77
45–	102	70	71	38	30	30	1	—	—	2	287	179	106	61	151	105
50–	143	90	76	46	63	42	3	2	1	—	433	235	157	73	229	139
55–	227	134	121	60	104	72	1	1	1	1	691	396	232	109	379	256
60–	284	238	128	120	151	112	4	5	1	1	929	565	320	151	537	367
65–	338	369	170	157	165	203	3	9	—	—	1191	841	337	217	742	556
70–	398	475	173	207	222	261	2	6	1	1	1320	1305	323	272	895	945
75–	399	492	141	187	254	302	4	3	—	—	1370	1361	276	233	996	1040
80–	266	443	97	156	167	283	2	4	—	—	854	1288	161	191	625	1006
85 and over	176	374	45	128	130	242	1	4	—	—	632	1183	82	142	503	948

Causes of death	492 Primary atypical pneumonia		493 Pneumonia, other and unspecified		500–502 Bronchitis		500 Acute bronchitis		501 Bronchitis unqualified		502 Chronic bronchitis		502.0 Bronchitis with emphysema		502.1 Others included under 502	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**19**	**9**	**823**	**719**	**17514**	**11467**	**2605**	**3042**	**1732**	**1697**	**13177**	**6728**	**4178**	**932**	**8999**	**5796**
0–	2	—	88	99	280	204	175	142	101	61	4	1	—	—	4	1
1–	—	—	15	14	28	19	18	10	10	8	—	1	—	—	—	1
2–	—	—	13	7	10	12	5	10	3	1	2	1	1	—	1	1
3–	1	—	2	2	5	4	5	3	—	1	—	—	—	—	—	—
4–	—	—	2	3	1	5	1	4	—	—	—	1	—	—	—	1
5–	—	—	3	2	9	10	5	8	1	2	3	—	—	—	3	—
10–	—	—	2	2	4	5	1	3	1	—	2	2	1	2	1	—
15–	—	—	7	5	11	5	7	4	2	1	2	—	—	—	2	—
20–	1	1	4	4	15	16	4	9	3	2	8	5	4	—	4	5
25–	—	—	4	7	22	12	9	5	3	3	10	4	4	2	6	2
30–	—	—	12	6	27	23	8	7	2	2	17	14	8	2	9	12
35–	1	—	13	20	62	39	9	12	3	8	50	19	19	7	31	12
40–	3	1	13	13	198	84	27	21	15	5	156	58	65	12	91	46
45–	—	—	30	13	458	143	43	22	30	11	385	110	185	32	200	78
50–	4	—	43	23	890	259	98	54	42	33	750	172	337	56	413	116
55–	2	3	78	28	1512	406	167	78	103	56	1242	272	554	76	688	196
60–	1	1	71	46	2462	772	232	142	195	96	2035	534	799	93	1236	441
65–	2	—	110	68	2830	1254	283	247	233	173	2314	834	824	148	1490	686
70–	1	—	101	88	3046	1976	422	450	312	279	2312	1247	652	187	1660	1060
75–	—	1	98	87	2685	2355	436	613	295	331	1954	1411	421	154	1533	1257
80–	1	2	67	89	1813	2050	371	604	225	293	1217	1153	221	103	996	1050
85 and over	—	—	47	93	1146	1814	279	594	153	331	714	889	83	58	631	831

TABLE 3.—(*contd.*)

Causes of death	510–527 Other diseases of respiratory system		510 Hypertrophy of tonsils and adenoids		511 Peritonsillar abscess (quinsy)		512 Chronic pharyngitis and nasopharyngitis		513 Chronic sinusitis		514 Deflected nasal septum		515 Nasal polyp		516 Chronic laryngitis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**3081**	**1458**	**18**	**22**	**9**	**13**	**—**	**1**	**40**	**31**	**1**	**—**	**5**	**2**	**3**	**—**
0–	37	25	—	—	1	—	—	—	3	1	—	—	—	—	—	—
1–	15	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	10	9	2	2	—	—	—	—	—	1	—	—	—	—	1	—
3–	7	8	3	1	—	—	—	—	—	1	—	—	—	—	1	—
4–	5	3	1	2	—	—	—	—	—	1	—	—	—	—	—	—
5–	17	16	9	7	—	—	—	—	1	1	—	—	—	—	—	—
10–	2	13	—	3	—	2	—	—	—	2	—	—	—	—	—	—
15–	16	16	—	—	—	—	—	—	3	3	—	—	—	—	—	—
20–	39	27	—	—	—	1	—	—	9	3	—	—	—	—	—	—
25–	42	25	1	—	2	2	—	—	3	1	1	—	—	—	—	—
30–	43	28	—	1	—	—	—	—	4	1	—	—	1	—	—	—
35–	66	41	—	2	1	—	—	—	2	1	—	—	—	—	—	—
40–	106	49	1	1	1	—	—	—	2	3	—	—	—	—	—	—
45–	221	58	—	—	1	1	—	—	5	1	—	—	—	—	—	—
50–	283	69	—	1	—	1	—	1	2	2	—	—	—	—	—	—
55–	410	76	1	—	2	1	—	—	—	2	—	—	1	—	—	—
60–	442	130	—	2	—	3	—	—	2	4	—	—	2	—	—	—
65–	448	133	—	—	—	1	—	—	2	1	—	—	—	—	—	—
70–	372	149	—	—	—	1	—	—	1	1	—	—	—	2	—	—
75–	216	157	—	—	—	—	—	—	1	1	—	—	1	—	—	—
80–	162	165	—	—	1	—	—	—	—	—	—	—	—	—	1	—
85 and over	122	256	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	517 Other diseases of upper respiratory tract		518 Empyema		519 Pleurisy		520 Spontaneous pneumothorax		521 Abscess of lung		522 Pulmonary congestion and hypostasis		523 Pneumoconiosis due to silica and silicates (occupational)		524 Other specified pneumoconiosis and pulmonary fibrosis of occupational origin	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**28**	**22**	**116**	**40**	**85**	**56**	**11**	**4**	**58**	**28**	**328**	**495**	**526**	**9**	**7**	**—**
0–	4	3	8	3	1	1	1	1	4	2	5	8	1	—	—	—
1–	3	1	2	—	—	—	—	—	2	—	1	1	—	—	—	—
2–	2	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—
3–	1	1	—	1	—	—	—	—	—	—	1	1	—	—	—	—
4–	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	3	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
15–	—	2	2	1	2	—	—	—	2	—	—	—	—	—	—	—
20–	—	1	3	—	1	—	—	1	1	—	—	—	—	—	—	—
25–	—	—	6	1	—	2	1	—	1	3	1	—	—	—	—	—
30–	1	1	1	2	—	1	1	—	4	2	—	1	3	—	—	—
35–	—	—	8	1	1	3	—	—	5	1	—	1	6	2	—	—
40–	—	—	4	2	2	1	1	—	1	1	—	2	21	—	—	—
45–	1	1	7	3	3	1	1	—	4	1	4	1	46	2	1	—
50–	2	1	5	5	5	3	1	—	7	3	1	2	65	2	—	—
55–	2	—	10	4	6	3	2	—	2	—	2	3	109	1	1	—
60–	—	1	14	3	10	1	2	—	9	5	5	5	98	—	3	—
65–	3	4	17	5	12	5	—	1	10	6	15	10	97	—	1	—
70–	3	2	13	4	17	9	1	—	5	—	39	32	62	1	1	—
75–	1	1	7	3	10	13	—	1	1	—	71	71	15	1	—	—
80–	—	1	8	1	8	6	—	—	—	3	85	128	2	—	—	—
85 and over	—	—	—	—	5	7	—	—	—	1	97	229	1	—	—	—

TABLE 3.—(*contd.*)

Causes of death	525 Other chronic interstitial pneumonia		526 Bronchi-ectasis		527 Other diseases of lung and pleural cavity		IX 530–587 **Diseases of the Digestive System**		530–539 Diseases of buccal cavity and œsophagus		530* 531 Abscesses of supporting structures of teeth		532 Other inflammatory diseases of supporting structures of teeth		533 Disorders of occlusion, eruption, and tooth development	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**171**	**78**	**1146**	**530**	**529**	**127**	**9658**	**7269**	**131**	**132**	**2**	**2**	**17**	**4**	**5**	**5**
0–	—	—	2	3	7	3	**1273**	**888**	5	7	—	—	—	—	4	4
1–	1	1	6	2	—	—	**118**	**74**	2	1	—	—	—	—	1	1
2–	1	—	1	2	1	1	**46**	**37**	—	—	—	—	—	—	—	—
3–	—	—	1	3	—	—	**36**	**13**	—	—	—	—	—	—	—	—
4–	1	—	1	—	—	—	**20**	**11**	1	—	—	—	—	—	—	—
5–	—	—	2	8	1	—	**64**	**61**	2	—	—	—	1	—	—	—
10–	—	—	—	6	1	—	**62**	**43**	1	—	—	—	—	—	—	—
15–	—	—	6	8	1	2	**68**	**44**	2	2	1	—	—	1	—	—
20–	—	1	23	20	2	—	**76**	**56**	2	1	—	—	1	—	—	—
25–	1	1	24	14	1	1	**114**	**89**	1	3	—	1	—	—	—	—
30–	1	1	20	17	7	1	**135**	**76**	4	1	—	—	2	—	—	—
35–	4	—	29	28	10	2	**235**	**148**	3	5	—	—	—	—	—	—
40–	8	4	53	31	12	4	**381**	**176**	3	2	—	—	1	—	—	—
45–	9	2	103	38	36	7	**623**	**252**	11	5	—	—	5	—	—	—
50–	19	5	129	35	47	8	**735**	**371**	9	6	1	1	—	—	—	—
55–	28	11	164	44	80	7	**861**	**498**	7	9	—	—	1	1	—	—
60–	24	10	186	77	87	19	**1061**	**693**	7	10	—	—	2	1	—	—
65–	30	12	171	65	90	23	**1146**	**894**	15	13	—	—	3	—	—	—
70–	24	16	133	61	73	20	**1099**	**988**	15	19	—	—	1	—	—	—
75–	15	5	55	45	39	16	**841**	**870**	16	19	—	—	—	—	—	—
80–	5	6	29	14	23	6	**438**	**580**	11	10	—	—	—	1	—	—
85 and over	—	3	8	9	11	7	**226**	**407**	14	19	—	—	—	—	—	—

Causes of death	534, 535* 536 Stomatitis		537 Diseases of salivary glands		538 Other diseases of buccal cavity		539 Diseases of œsophagus		540–545 Diseases of stomach and duodenum		540 Ulcer of stomach		540.0 Without mention of perforation		540.1 With perforation	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**6**	**9**	**36**	**46**	**4**	**6**	**58**	**53**	**3958**	**1291**	**2019**	**792**	**1363**	**616**	**656**	**176**
0–	—	2	1	1	—	—	—	—	18	16	—	—	—	—	—	—
1–	1	—	—	—	—	—	—	—	2	3	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	1	—	1	1	—	—	—	—	—	—
5–	—	—	—	—	—	—	1	—	—	2	—	—	—	—	—	—
10–	—	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—
15–	—	—	—	—	—	—	1	—	8	6	3	6	2	6	1	—
20–	—	—	1	—	—	—	—	1	18	6	7	1	3	1	4	—
25–	—	—	—	—	—	—	1	1	36	5	9	1	5	—	4	1
30–	—	1	—	—	—	—	2	—	51	8	21	4	16	2	5	2
35–	—	—	—	—	—	1	3	3	121	21	47	15	30	10	17	5
40–	—	—	1	—	—	—	1	2	215	36	97	16	65	11	32	5
45–	—	1	2	—	1	1	2	3	377	62	178	40	104	31	74	9
50–	1	1	1	2	1	—	5	2	432	70	216	38	140	32	76	6
55–	—	—	2	—	—	—	4	7	493	87	257	50	171	35	86	15
60–	—	2	—	2	—	—	5	3	586	168	319	116	223	91	96	25
65–	2	—	1	3	1	—	8	10	568	187	291	118	204	89	87	29
70–	—	1	2	7	—	—	12	11	466	226	260	154	170	118	90	36
75–	1	1	6	9	—	2	8	7	348	189	189	126	136	102	53	24
80–	—	—	8	7	1	—	1	1	143	125	82	77	61	62	21	15
85 and over	1	—	11	15	—	2	2	2	72	73	43	30	33	26	10	4

* **530,** Dental caries, 45, 75, 80; *15, 25, 35, 55, 60, 80*; **534,** Toothache from unspecified cause, —; **535,** Other diseases of teeth and supporting structures, *60*.

TABLE 3.—(*contd.*)

Causes of death	541 Ulcer of duodenum		541.0 Without mention of perforation		541.1 With perforation		542 Gastrojejunal ulcer		542.0 Without mention of perforation		542.1 With perforation		543 Gastritis and duodenitis		544 Disorders of function of stomach	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**1737**	**310**	**1087**	**197**	**650**	**113**	**55**	**16**	**38**	**12**	**17**	**4**	**79**	**128**	**18**	**19**
0–	—	—	—	—	—	—	—	1	—	1	—	—	14	11	2	3
1–	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—
5–	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—	—
10–	2	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—
15–	2	—	—	—	2	—	—	—	—	—	—	—	2	—	1	—
20–	10	4	6	3	4	1	—	—	—	—	—	—	—	1	1	—
25–	24	3	15	1	9	2	2	1	1	1	1	—	—	—	1	—
30–	29	2	14	1	15	1	—	—	—	—	—	—	1	1	—	1
35–	70	3	45	1	25	2	—	—	—	—	—	—	1	2	—	1
40–	108	14	77	8	31	6	4	1	3	—	1	1	2	2	1	2
45–	187	18	132	15	55	3	5	—	3	—	2	—	2	1	1	1
50–	189	26	123	19	66	7	10	2	6	2	4	—	8	1	1	—
55–	221	27	145	21	76	6	11	3	10	1	1	2	—	4	—	—
60–	242	43	151	21	91	22	12	—	8	—	4	—	6	7	1	—
65–	255	43	150	27	105	16	4	3	2	3	2	—	8	18	1	2
70–	186	49	116	30	70	19	4	2	2	1	2	1	8	14	3	3
75–	137	35	63	22	74	13	2	1	2	1	—	—	14	23	2	2
80–	55	23	35	15	20	8	1	2	1	2	—	—	4	18	—	1
85 and over	20	19	14	12	6	7	—	—	—	—	—	—	7	22	1	2

Causes of death	545 Other diseases of stomach and duodenum		550–553 Appendicitis		550 Acute appendicitis		550.0 Without mention of peritonitis		550.1 With peritonitis		551 Appendicitis, unqualified		552 Other appendicitis		553 Other diseases of appendix	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**50**	**26**	**739**	**507**	**644**	**451**	**89**	**56**	**555**	**395**	**91**	**50**	**3**	**6**	**1**	—
0–	2	1	5	3	5	2	—	—	5	2	—	1	—	—	—	—
1–	—	1	10	7	10	7	—	—	10	7	—	—	—	—	—	—
2–	—	—	17	16	17	16	1	5	16	11	—	—	—	—	—	—
3–	—	—	19	8	19	8	1	1	18	7	—	—	—	—	—	—
4–	—	—	12	7	11	7	1	—	10	7	1	—	—	—	—	—
5–	—	—	37	27	34	26	2	1	32	25	3	1	—	—	—	—
10–	—	—	37	29	35	26	3	—	32	26	2	3	—	—	—	—
15–	—	—	43	16	38	16	2	2	36	14	5	—	—	—	—	—
20–	—	—	27	13	25	13	3	3	22	10	2	—	—	—	—	—
25–	—	—	24	19	22	16	4	1	18	15	2	3	—	—	—	—
30–	—	—	22	14	17	11	2	2	15	9	5	3	—	—	—	—
35–	3	—	36	21	26	20	4	4	22	16	10	1	—	—	—	—
40–	3	1	42	18	33	13	9	2	24	11	8	5	1	—	—	—
45–	4	2	48	27	41	21	10	1	31	20	6	5	1	1	—	—
50–	8	3	46	40	38	35	6	7	32	28	8	3	—	2	—	—
55–	4	3	52	35	43	32	5	3	38	29	9	3	—	—	—	—
60–	6	2	63	44	58	41	10	8	48	33	5	2	—	1	—	—
65–	9	3	66	49	56	40	9	8	47	32	9	8	1	1	—	—
70–	5	4	67	54	58	45	11	1	47	44	8	9	—	—	1	—
75–	4	2	39	40	36	37	3	3	33	34	3	3	—	—	—	—
80–	1	4	21	15	18	14	3	1	15	13	3	—	—	1	—	—
85 and over	1	—	6	5	4	5	—	3	4	2	2	—	—	—	—	—

TABLE 3.—(*contd.*)

Causes of death	560–561 Hernia of abdominal cavity		560 Hernia of abdominal cavity without mention of obstruction		561 Hernia of abdominal cavity with obstruction		570–578 Other diseases of intestines and peritoneum		570 Intestinal obstruction without mention of hernia		570.0 Intus-susception		570.1 Paralytic ileus		570.2 Mesenteri infarctio	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**842**	**889**	**191**	**124**	**651**	**765**	**2764**	**2676**	**827**	**813**	**115**	**68**	**29**	**25**	**72**	
0–	71	38	50	34	21	4	1144	794	97	65	76	46	1	—	3	
1–	10	1	7	1	3	—	89	58	11	10	10	10	—	—	—	
2–	—	1	—	—	—	1	26	14	12	3	7	2	—	—	—	
3–	1	—	1	—	—	—	13	5	5	2	1	1	—	—	—	
4–	2	—	2	—	—	—	4	2	2	—	—	—	—	—	—	
5–	2	2	1	2	1	—	15	22	5	6	5	3	—	—	—	
10–	1	—	—	—	1	—	19	9	9	5	4	—	—	—	—	
15–	1	—	1	—	—	—	9	13	3	6	—	1	—	—	—	
20–	—	3	—	1	—	2	23	20	10	6	1	—	1	1	—	
25–	2	3	1	2	1	1	38	43	21	14	1	—	1	2	1	
30–	2	5	—	1	2	4	33	36	19	8	1	1	1	—	2	
35–	11	11	5	—	6	11	42	51	16	13	—	1	—	2	—	
40–	14	18	5	4	9	14	53	53	19	22	2	—	1	1	1	
45–	32	20	14	2	18	18	77	70	34	31	—	—	—	2	2	
50–	32	33	9	4	23	29	115	96	54	36	—	—	4	2	7	
55–	51	60	16	14	35	46	135	138	59	52	1	—	2	2	7	
60–	87	85	21	4	66	81	161	167	75	61	3	—	7	—	15	
65–	97	123	14	18	83	105	213	245	101	88	2	1	3	4	8	
70–	142	158	18	14	124	144	224	267	115	111	1	—	6	3	15	
75–	125	154	13	12	112	142	184	237	88	110	—	1	1	3	7	
80–	101	97	10	7	91	90	97	187	46	94	—	1	1	1	3	
85 and over	58	77	3	4	55	73	50	149	26	70	—	—	—	2	1	

Causes of death	570.3 Volvulus		570.4 Impaction of intestine		570.5 Others included under 570		571 Gastro-enteritis and colitis, except ulcerative, age 4 weeks and over		572 Chronic enteritis and ulcerative colitis		572.0 Regional enteritis		572.1 Diverticulitis		572.2 Ulcerativ colitis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**204**	**170**	**16**	**48**	**391**	**435**	**1328**	**1084**	**422**	**583**	**24**	**24**	**240**	**283**	**143**	
0–	11	11	—	1	6	7	1032	719	2	3	—	—	—	—	2	
1–	—	—	—	—	1	—	75	47	1	—	—	—	—	—	1	
2–	5	1	—	—	—	—	13	10	—	—	—	—	—	—	—	
3–	1	—	—	—	3	1	6	3	1	—	—	—	—	—	1	
4–	1	—	—	—	1	—	2	1	—	—	—	—	—	—	—	
5–	—	2	—	—	—	1	4	11	1	2	—	—	—	—	—	
10–	4	1	—	—	1	4	3	2	3	—	—	—	—	—	3	
15–	1	3	—	—	2	2	3	—	3	7	—	1	—	—	3	
20–	3	3	—	—	5	2	3	4	9	9	3	1	—	—	6	
25–	5	3	—	—	13	9	4	3	11	23	—	1	—	1	11	
30–	3	2	—	—	12	4	1	—	11	23	—	2	2	2	9	
35–	7	1	—	—	9	8	4	3	15	30	1	2	1	4	13	
40–	5	5	—	—	10	10	6	1	23	25	4	—	3	2	16	
45–	10	11	—	1	22	16	10	7	23	25	1	5	11	5	11	
50–	18	11	—	1	25	17	12	9	26	39	2	1	17	18	7	
55–	16	14	2	1	31	28	16	20	42	53	—	2	19	22	23	
60–	11	12	2	3	37	41	13	14	55	72	4	5	36	43	13	
65–	35	24	3	7	50	40	25	46	68	80	7	1	51	48	9	
70–	25	17	3	10	65	69	30	41	52	84	2	3	40	64	9	
75–	28	16	2	12	50	68	36	46	42	64	—	—	34	45	5	
80–	9	20	3	7	30	60	17	47	25	32	—	—	20	21	1	
85 and over	6	13	1	5	18	48	13	50	9	12	—	—	6	8	—	

TABLE 3.—(*contd.*)

auses of death	572.3 Others included under 572		573 Functional disorders of intestines		574 Anal fissure and fistula		575 Abscess of anal and rectal regions		576 Peritonitis		577 Peritoneal adhesion		578 Other diseases of intestines and peritoneum		580–587 Diseases of liver, gallbladder and pancreas	
ges at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ll Ages	**15**	**25**	**3**	**7**	**2**	**3**	**27**	**12**	**62**	**40**	**8**	**14**	**85**	**120**	**1224**	**1774**
0–	—	2	—	—	—	—	—	—	9	3	—	—	4	4	30	30
1–	—	—	—	—	—	—	—	—	2	1	—	—	—	—	5	4
2–	—	—	—	—	—	—	—	—	1	—	—	—	—	1	3	6
3–	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
5–	1	1	—	—	—	—	—	—	3	2	—	—	2	1	8	8
10–	—	—	—	—	—	—	—	—	1	2	—	—	3	—	2	5
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	7
20–	—	1	—	—	—	—	—	—	—	—	—	1	1	—	6	13
25–	—	—	—	—	—	—	—	—	—	2	—	—	2	1	13	16
30–	—	—	—	—	—	—	—	—	1	2	—	1	1	2	23	12
35–	—	—	—	—	1	—	1	—	2	1	1	2	2	2	22	39
40–	—	—	1	—	—	—	—	—	2	1	—	3	2	1	54	49
45–	—	—	—	—	—	—	2	1	4	4	1	1	3	1	78	68
50–	—	1	—	1	—	1	3	—	7	2	2	—	11	8	101	126
55–	—	1	—	—	—	—	4	1	5	5	—	1	9	6	123	169
60–	2	1	—	—	—	—	4	2	7	1	1	3	6	14	157	219
65–	1	2	—	2	—	—	3	1	6	5	1	1	9	22	187	277
70–	1	3	1	2	—	—	8	4	3	6	2	—	13	19	185	264
75–	3	6	—	1	1	—	1	1	7	2	—	—	9	13	129	231
80–	4	4	1	—	—	2	1	—	2	1	—	1	5	10	65	146
85 and over	3	3	—	1	—	—	—	2	—	—	—	—	2	14	26	84

Causes of death	580 Acute and subacute yellow atrophy of liver		581 Cirrhosis of liver		582 Suppurative hepatitis and liver abscess		583 Other diseases of liver		584 Cholelithiasis		585 Cholecystitis without mention of calculi		586 Other diseases of gallbladder and biliary ducts		587 Diseases of pancreas	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**54**	**98**	**556**	**362**	**24**	**10**	**10**	**25**	**211**	**521**	**169**	**472**	**28**	**53**	**172**	**233**
0–	3	8	6	—	1	—	1	1	—	—	—	—	2	—	17	21
1–	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4
2–	1	4	—	—	—	—	—	—	—	—	—	—	—	—	2	2
3–	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	3	4	3	2	1	—	—	—	—	—	—	—	—	—	1	2
10–	—	1	2	4	—	—	—	—	—	—	—	—	—	—	—	—
15–	—	3	3	3	1	—	—	—	—	—	—	1	—	—	1	—
20–	1	2	—	4	2	—	—	1	1	2	—	—	—	—	2	4
25–	3	10	3	1	3	—	—	—	—	2	1	—	—	—	3	3
30–	5	2	8	4	2	—	—	—	3	1	—	2	2	—	3	3
35–	1	3	11	14	2	—	—	1	3	10	1	2	—	3	4	6
40–	4	6	30	15	1	1	—	—	4	11	2	9	2	2	11	5
45–	5	8	50	22	—	—	—	1	6	16	7	9	2	2	8	10
50–	3	5	54	48	3	—	3	4	12	24	8	20	3	11	15	14
55–	4	7	72	43	2	3	—	1	19	50	11	35	2	7	13	23
60–	6	5	74	63	2	2	3	5	25	51	21	52	2	6	24	35
65–	4	15	93	48	1	2	1	2	39	95	23	75	3	8	23	32
70–	7	6	86	49	2	1	—	3	33	97	30	71	6	6	21	31
75–	1	4	34	28	1	1	—	5	39	83	38	81	2	7	14	22
80–	1	2	19	10	—	—	2	—	20	50	16	70	2	1	5	13
85 and over	—	2	7	4	—	—	—	1	7	29	11	45	—	—	1	3

TABLE 3.—(*contd.*)

Causes of death	X 590–637 Diseases of the Genito-Urinary system		590–594 Nephritis and nephrosis		590 Acute nephritis		591 Nephritis with œdema, including nephrosis		592 Chronic nephritis		593 Nephritis not specified as acute or chronic		594 Other renal sclerosis		600–609 Other diseases of urinary system	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**9602**	**4512**	**3400**	**3321**	**178**	**147**	**129**	**117**	**2883**	**2820**	**210**	**208**	—	**29**	**1117**	**911**
0–	**52**	**27**	21	10	14	7	2	1	4	1	1	1	—	—	22	16
1–	**5**	**9**	—	7	—	4	—	—	—	1	—	1	—	1	1	2
2–	**9**	**9**	9	4	3	3	2	1	3	—	1	—	—	—	—	3
3–	**12**	**2**	8	1	—	—	5	—	3	1	—	—	—	—	3	—
4–	**5**	**7**	4	6	—	4	1	1	3	1	—	—	—	—	1	1
5–	**31**	**22**	25	18	5	7	11	2	8	9	1	—	—	—	6	4
10–	**38**	**48**	33	44	6	9	4	9	19	22	4	4	—	—	5	2
15–	**58**	**67**	54	63	7	12	7	4	37	41	3	3	—	3	4	3
20–	**78**	**70**	75	49	6	11	7	3	60	33	2	2	—	—	3	12
25–	**109**	**92**	104	59	8	5	8	10	83	43	5	1	—	—	4	21
30–	**109**	**126**	97	100	7	10	5	8	79	78	6	3	—	1	12	15
35–	**152**	**151**	129	108	11	4	8	8	103	91	7	4	—	1	22	23
40–	**215**	**196**	170	135	9	9	8	8	143	108	10	8	—	2	44	29
45–	**232**	**256**	180	176	18	5	10	12	143	147	9	11	—	1	43	41
50–	**279**	**278**	195	196	14	12	11	3	163	173	7	8	—	—	61	53
55–	**424**	**366**	263	255	15	2	8	5	219	232	21	15	—	1	67	92
60–	**772**	**445**	328	339	10	13	8	17	293	284	17	22	—	3	129	77
65–	**1245**	**592**	477	427	13	12	10	13	423	370	31	30	—	2	160	133
70–	**1644**	**594**	408	460	15	5	7	6	356	413	30	30	—	6	180	118
75–	**1906**	**555**	418	418	9	9	2	4	378	373	29	28	—	4	168	125
80–	**1402**	**335**	265	250	6	3	4	—	236	219	19	25	—	3	121	80
85 and over	**825**	**265**	137	196	2	1	1	2	127	180	7	12	—	1	61	61

Causes of death	600 Infections of kidney		601 Hydro-nephrosis		602 Culculi of kidney and ureter		603 Other diseases of kidney and ureter		604 Calculi of other parts of urinary system		605 Cystitis		606 Other diseases of bladder		607* 608 Stricture of urethra	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**421**	**514**	**62**	**51**	**135**	**119**	**29**	**18**	**30**	**6**	**217**	**177**	**54**	**19**	**161**	**3**
0–	15	12	2	1	3	—	2	3	—	—	—	—	—	—	—	—
1–	1	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—
2–	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	1	—	—	—	1	—	1	—	—	—
4–	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—
5–	3	3	1	1	—	—	—	—	1	—	—	—	—	—	1	—
10–	1	1	2	—	—	—	1	—	—	—	—	—	1	1	—	—
15–	2	3	1	—	1	—	—	—	—	—	—	—	—	—	—	—
20–	1	9	1	—	—	2	—	1	—	—	—	—	—	—	1	—
25–	2	12	—	—	—	4	1	2	—	—	1	3	—	—	—	—
30–	7	7	2	1	—	3	—	1	—	—	3	1	—	2	—	—
35–	8	9	—	1	7	5	—	1	—	—	4	6	1	1	2	—
40–	15	16	7	1	9	9	3	—	2	—	3	1	1	2	4	—
45–	9	26	5	4	16	5	3	2	—	—	2	3	1	—	6	—
50–	22	25	3	7	16	11	1	1	2	1	4	5	5	3	8	—
55–	24	53	5	7	11	15	2	3	3	1	9	10	1	3	12	—
60–	56	50	4	3	22	13	2	2	1	—	14	8	6	1	23	—
65–	63	76	9	10	15	20	4	—	4	—	25	24	7	2	30	—
70–	74	64	8	5	18	13	4	1	7	2	32	31	11	1	25	1
75–	55	75	8	4	13	9	1	1	6	—	43	32	9	1	32	2
80–	40	49	2	4	4	4	4	—	3	2	51	20	6	—	11	—
85 and over	23	20	1	2	—	4	1	—	1	—	25	33	4	2	6	—

* **607,** Urethritis (non-venereal), *80.*

TABLE 3.—(*contd.*)

Causes of death	609 Other diseases of urethra		610–617 Diseases of male genital organs	610 Hyperplasia of prostate	611 Prostatitis	612 Other diseases of prostate	613 Hydrocele	614* 615 Redundant prepuce and phimosis	616* 617 Other diseases of male genital organs
Ages at death	M	F	M	M	M	M	M	M	M
All Ages	**8**	**3**	**5085**	**4932**	**110**	**13**	**3**	**17**	**8**
0–	—	—	9	—	—	—	—	9	—
1–	—	—	4	—	—	—	—	4	—
2–	—	—	—	—	—	—	—	—	—
3–	—	—	1	—	—	—	1	—	—
4–	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	—
15–	—	—	—	—	—	—	—	—	—
20–	—	—	—	—	—	—	—	—	—
25–	—	—	1	1	—	—	—	—	—
30–	—	—	—	—	—	—	—	—	—
35–	—	—	1	—	1	—	—	—	—
40–	—	—	1	1	—	—	—	—	—
45–	1	1	9	7	1	1	—	—	—
50–	—	—	23	20	3	—	—	—	—
55–	—	—	94	91	1	—	—	—	2
60–	1	—	315	304	8	2	—	—	1
65–	3	1	608	603	3	2	—	—	—
70–	1	—	1056	1029	21	1	—	1	2
75–	1	1	1320	1288	25	5	1	—	1
80–	—	—	1016	982	30	1	—	2	1
85 and over	1	—	627	606	17	1	1	1	1

Causes of death	620–626 Diseases of breast, ovary Fallopian tube, and parametrium	620, 621* 622 Acute salpingitis and oophoritis	623* 624 Salpingitis and oophoritis unqualified	625 Other diseases of ovary and Fallopian tube	626 Diseases of parametrium and pelvic peritoneum (female)	630–637 Diseases of uterus and other female genital organs	630 Infective disease of uterus, vagina, and vulva	631 Uterovaginal prolapse
Ages at death	F	F	F	F	F	F	F	F
All Ages	**81**	**7**	**47**	**3**	**15**	**199**	**12**	**119**
0–	1	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	2	2	—
3–	1	—	1	—	—	—	—	—
4–	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—
10–	1	—	1	—	—	1	—	—
15–	1	—	1	—	—	—	—	—
20–	6	—	6	—	—	3	—	—
25–	8	—	7	—	1	4	1	—
30–	9	2	4	—	2	2	—	—
35–	11	—	9	1	—	9	1	—
40–	12	3	3	—	4	20	1	7
45–	13	1	9	—	3	26	—	11
50–	4	1	2	—	1	25	1	15
55–	2	—	1	—	1	17	1	16
60–	4	—	3	—	—	25	1	18
65–	3	—	—	1	1	29	2	21
70–	2	—	—	—	—	14	1	13
75–	3	—	—	1	2	9	—	9
80–	—	—	—	—	—	5	—	4
85 and over	—	—	—	—	—	8	1	5

* **614,** Orchitis and epididymitis, 70, 70 ; **616,** Sterility, male, — ; **620,** Chronic cystic disease of breast, *65* ; **621,** Other diseases of breast, *0, 40, 60, 70* ; **623,** Chronic salpingitis and oophoritis, *30, 35, 40, 70.*

TABLE 3.—(*contd.*)

Causes of death	632* 633 Other diseases of uterus	634 Disorders of menstruation	635, 636* 637 Other diseases of female genital organs	XI 640-689 Deliveries, and Complications of Pregnancy Childbirth, and the Puerperium	640–649 Complications of pregnancy	640, 641* 642 Toxæmias of pregnancy	643 Placenta prævia	644 Other hæmorrhage of pregnancy
Ages at death	F	F	F	F	F	F	F	F
All Ages	**37**	**16**	**5**	**727**	**198**	**120**	**6**	**10**
0–	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—
10–	—	1	—	—	—	—	—	—
15–	—	—	—	18	3	2	—	—
20–	1	1	1	110	29	15	—	3
25–	2	—	—	186	42	25	—	1
30–	1	1	—	151	39	24	3	2
35–	4	3	1	169	56	35	3	3
40–	6	3	—	80	27	17	—	1
45–	8	3	—	9	1	1	—	—
50–	5	2	—	2	1	1	—	—
55–	—	—	—	1	—	—	—	—
60–	3	1	2	1	—	—	—	—
65–	4	1	1	—	—	—	—	—
70–	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—
80–	1	—	—	—	—	—	—	—
85 and over	2	—	—	—	—	—	—	—

Causes of death	645 Ectopic pregnancy	646, 647* 648 Other complications arising from pregnancy	650–652 Abortion	650 Abortion without mention of sepsis or toxæmia	651 Abortion with sepsis	652 Abortion with toxæmia, without mention of sepsis	660 Delivery without complication	670–678 Delivery with specifie complicatior
Ages at death	F	F	F	F	F	F	F	F
All Ages	**36**	**15**	**118**	**32**	**78**	**8**	**1**	**241**
0–	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—
15–	1	—	7	2	5	—	—	6
20–	7	2	25	4	19	2	—	27
25–	9	3	29	7	20	2	1	60
30–	5	5	20	6	13	1	—	62
35–	7	3	29	10	17	2	—	49
40–	7	2	8	3	4	1	—	29
45–	—	—	—	—	—	—	—	6
50–	—	—	—	—	—	—	—	—
55–	—	—	—	—	—	—	—	1
60–	—	—	—	—	—	—	—	1
65–	—	—	—	—	—	—	—	—
70–	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—

* **632,** Malposition of uterus, *25, 45, 50* ; **635,** Menopausal symptoms, *40, 40, 40, 45, 45, 45, 50* ; **636,** Sterility, female, — ; **64**
Pyelitis and pyelonephritis of pregnancy, *20, 35, 35, 35, 35* ; **641,** Other infections of genito-urinary tract during pregnancy, *25, 25*
646, Anæmia of pregnancy, *25, 25, 35* ; **647,** Pregnancy with malposition of fœtus in uterus, *20*.

TABLE 3.—(*contd.*)

Causes of death	670 Delivery complicated by placenta prævia or antepartum hæmorrhage	671 Delivery complicated by retained placenta	671 Delivery complicated by other postpartum hæmorrhage	673* 674 Delivery complicated by dispro-portion or malposition of fœtus	675 Delivery complicated by prolonged labour of other origin	676* 677 Delivery with other trauma	678 Delivery with other complications of childbirth	680–689 Complications of the puerperium
Ages at death	F	F	F	F	F	F	F	F
All Ages	**22**	**43**	**47**	**34**	**26**	**26**	**33**	**169**
0–	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—
15–	—	—	2	—	—	3	1	2
20–	2	6	7	4	1	3	4	29
25–	4	14	10	9	6	7	9	54
30–	6	9	14	8	6	8	8	30
35–	5	10	6	9	8	3	5	35
40–	4	3	5	4	4	2	5	16
45–	1	1	2	—	1	—	1	2
50–	—	—	—	—	—	—	—	1
55–	—	—	1	—	—	—	—	—
60–	—	—	—	—	—	—	—	—
65–	—	—	—	—	—	—	—	—
70–	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—

Causes of death	680* 681 Sepsis of childbirth and the puerperium	682 Puerperal phlebitis and thrombosis	683* 684 Puerperal pulmonary embolism	685 Puerperal eclampsia	686 Other forms of puerperal toxæmia	687, 688, 689* XII 690-716 Diseases of the Skin and Cellular Tissue		690–698 Infections of skin and subcutaneous tissue		690 Boil and carbuncle	
Ages at death	F	F	F	F	F	M	F	M	F	M	F
All Ages	**25**	**31**	**25**	**60**	**19**	**288**	**303**	**137**	**116**	**58**	**42**
0–	—	—	—	—	—	33	12	16	6	1	—
1–	—	—	—	—	—	2	1	1	1	—	—
2–	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	1	—	1	—	1
4–	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	3	3	1	1	1	—
10–	—	—	—	—	—	1	—	—	—	—	—
15–	—	—	1	—	1	3	8	2	5	2	3
20–	5	4	5	10	2	6	4	5	2	4	1
25–	8	12	7	19	5	6	2	4	1	3	1
30–	9	2	3	12	4	2	3	1	1	—	—
35–	1	9	7	12	3	7	6	4	2	3	1
40–	2	3	2	7	2	9	6	5	—	3	—
45–	—	—	—	—	2	13	9	7	3	2	2
50–	—	1	—	—	—	6	19	—	5	—	2
55–	—	—	—	—	—	27	17	15	8	7	4
60–	—	—	—	—	—	17	24	8	13	1	4
65–	—	—	—	—	—	32	33	15	10	6	3
70–	—	—	—	—	—	38	46	17	20	7	9
75–	—	—	—	—	—	39	45	20	17	8	3
80–	—	—	—	—	—	20	37	6	10	4	4
85 and over	—	—	—	—	—	24	27	10	10	6	4

* **673,** Delivery complicated by abnormality of bony pelvis, *25, 30, 30, 30, 35, 35, 35, 40, 40* ; **676,** Delivery with laceration of perineum without mention of other laceration, *60* ; **680,** Puerperal urinary infection without other sepsis, *25, 35* ; **683,** Pyrexia of unknown origin during the puerperium, — ; **687,** Cerebral hæmorrhage in the puerperium, *20, 35, 35* ; **688,** Other and unspecified complications of the puerperium, *20, 25, 25* ; **689,** Mastitis and other disorders of lactation, *20*.

TABLE 3.—(*contd.*)

Causes of death	691 Cellulitis of finger and toe		692 Other cellulitis and abscess without mention of lymphangitis		693–697* 698 Other local infections of skin and subcutaneous tissue		700–716 Other diseases of skin and subcutaneous tissue		700 Seborrhœic dermatitis		701 Eczema		702* 703 Other dermatitis		704 Pemphigus	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**2**	**3**	**64**	**58**	**6**	**5**	**151**	**187**	**3**	**3**	**20**	**12**	**36**	**37**	**44**	**48**
0–	—	—	11	5	3	—	17	6	1	—	10	2	4	2	—	1
1–	—	—	1	1	—	—	1	—	—	—	1	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	2	2	—	—	—	—	—	—	1	—
10–	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
15–	—	—	—	1	—	—	1	3	—	—	—	—	—	1	—	1
20–	—	—	—	1	—	—	1	2	—	—	—	—	1	1	—	—
25–	—	—	1	—	—	—	2	1	—	—	1	—	—	1	—	—
30–	—	—	1	1	—	—	1	2	—	—	—	—	—	2	—	—
35–	—	—	1	1	—	—	3	4	—	—	—	—	1	1	2	—
40–	—	—	2	—	—	—	4	6	—	—	—	—	—	1	1	2
45–	—	—	4	1	—	—	6	6	—	—	—	—	2	4	2	1
50–	—	—	—	3	—	—	6	14	—	—	—	—	1	1	3	4
55–	2	—	5	3	—	—	12	9	—	—	—	—	5	2	4	4
60–	—	—	6	6	—	1	9	11	—	1	1	2	2	1	3	4
65–	—	1	9	5	—	—	17	23	—	—	1	2	5	2	7	8
70–	—	—	9	9	—	2	21	26	2	—	2	1	8	6	7	6
75–	—	—	9	13	3	1	19	28	—	1	1	1	5	7	4	7
80–	—	1	1	4	—	1	14	27	—	1	2	3	1	3	6	8
85 and over	—	1	4	4	—	—	14	17	—	—	1	1	1	2	4	2

Causes of death	705 Erythematous conditions		706 Psoriasis and similar disorders		707–709* 710 Other hypertrophic and atrophic conditions of skin		711–714* 715 Chronic ulcer of skin		716* **XIII 720–749 Diseases of the Bones and Organs of Movement**		720–727 Arthritis and rheumatism, except rheumatic fever		720 Acute arthritis due to pyogenic organisms		721* 722 Rheumatoid arthritis and allied conditions	
Age at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**11**	**18**	**5**	**5**	**8**	**7**	**21**	**56**	**685**	**1367**	**456**	**1169**	**19**	**9**	**276**	**902**
0–	1	—	—	—	—	—	—	1	**15**	**13**	1	1	—	—	—	—
1–	—	—	—	—	—	—	—	—	**1**	**1**	1	—	—	—	1	—
2–	—	—	—	—	—	—	—	—	**2**	**3**	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	**1**	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	**1**	**2**	—	1	—	—	—	1
5–	—	1	—	—	1	1	—	—	**10**	**5**	5	2	1	—	—	—
10–	—	—	—	—	1	—	—	—	**16**	**7**	5	5	—	—	1	—
15–	—	1	—	—	1	—	—	—	**15**	**5**	1	—	1	—	—	—
20–	—	1	—	—	—	—	—	—	**8**	**4**	2	2	—	—	—	1
25–	1	—	—	—	—	—	—	—	**12**	**9**	3	4	—	1	3	1
30–	—	—	1	—	—	—	—	—	**8**	**2**	5	1	—	—	4	1
35–	—	2	—	—	—	—	—	1	**17**	**13**	7	10	1	—	3	6
40–	1	1	1	—	1	1	—	1	**21**	**19**	15	11	1	—	10	10
45–	—	1	—	—	2	—	—	—	**25**	**35**	15	27	1	1	10	18
50–	—	4	—	—	1	2	1	3	**23**	**49**	13	39	1	1	8	33
55–	1	1	1	—	—	1	—	1	**46**	**70**	31	60	—	—	22	50
60–	1	1	1	1	—	—	1	1	**62**	**150**	43	127	1	1	32	102
65–	1	1	1	2	—	1	2	7	**98**	**160**	67	136	3	1	45	117
70–	2	1	—	1	—	1	—	10	**105**	**263**	79	238	2	3	55	191
75–	2	2	—	—	—	—	6	10	**112**	**241**	89	216	4	1	51	165
80–	—	1	—	1	1	—	4	9	**60**	**189**	49	178	—	—	21	130
85 and over	1	—	—	—	—	—	7	12	**28**	**126**	25	111	3	—	10	76

* **693,** Other cellulitis and abscess with lymphangitis, 45, 55, 60, 70, 80, *0, 15, 55, 60, 60, 85* ; **694,** Acute lymphadenitis, *5, 65* ; **695,** Impetigo, 0, 20, — ; **696,** Infectious warts, — ; **697,** Molluscum contagiosum, — ; **702,** Occupational dermatitis, 0 ; **707,** Lichen planus, — ; **708,** Pruritus and related conditions, — ; **709,** Corns and callosities, — ; **711,** Other dermatoses, — ; **712,** Diseases of nail, — ; **713,** Diseases of hair and hair follicles, — ; **714,** Diseases of sweat and sebaceous glands, 55, 75, *80* ; **716,** Other diseases of skin, — ; **721,** Acute nonpyogenic arthritis, —.

TABLE 3.—(*contd.*)

Causes of death	723 Osteo-arthritis (arthrosis) and allied conditions		724 Other specified forms of arthritis		725 Arthritis (unspecified)		726 Muscular rheumatism		727 Rheumatism unspecified		727a Rheumatism unspecified, acute		727b* 727c; d; e Others included under 727		730–738 Osteomyelitis and other diseases of bone and joint	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**119**	**186**	**5**	**13**	**7**	**8**	**4**	**3**	**26**	**48**	**10**	**15**	**13**	**25**	**151**	**144**
0–	—	—	1	1	—	—	—	—	—	—	—	—	—	—	6	5
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
5–	1	—	—	—	—	—	1	—	2	2	1	2	—	—	4	2
10–	—	—	—	—	—	—	—	—	4	5	4	3	—	—	2	2
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	4
20–	1	—	1	—	—	—	—	—	—	1	—	1	—	—	1	—
25–	—	—	—	—	—	—	—	—	—	2	—	—	—	—	5	2
30–	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
35–	2	1	—	1	—	—	—	—	1	2	—	1	—	—	6	2
40–	2	—	—	—	—	—	—	—	2	1	1	—	1	1	3	5
45–	3	5	—	—	—	—	—	—	1	3	1	—	—	2	8	—
50–	3	2	1	1	—	—	—	—	—	2	—	2	—	—	8	5
55–	7	6	—	—	—	1	—	1	2	2	—	—	1	1	11	7
60–	7	18	1	1	2	—	—	1	—	4	—	1	—	3	11	17
65–	16	16	—	1	—	1	1	—	2	—	—	—	2	—	23	21
70–	21	30	—	3	1	1	—	—	—	10	—	1	—	8	22	22
75–	26	36	—	4	2	2	—	1	6	7	2	2	4	5	19	22
80–	22	39	—	1	2	3	1	—	3	5	1	2	2	3	10	11
85 and over	7	33	1	—	—	—	1	—	3	2	—	—	3	2	3	14

Causes of death	730 Osteomyelitis and periostitis		731 Osteitis deformans		732* 733 Other diseases of bone		734* 735 Displacement of intervertebral disc		736, 737, 738* 740–749 Other diseases of musculo-skeletal system		740, 741, 742, 743* 744 Other diseases of muscle, tendon, and fascia		745 Curvature of spine		746, 747, 748, 749* XIV 750-759 Congenital Mal-formations	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**70**	**37**	**63**	**72**	**10**	**22**	**6**	**5**	**78**	**54**	**58**	**39**	**10**	**10**	**2406**	**2238**
0–	6	5	—	—	—	—	—	—	8	7	5	7	—	—	1690	1464
1–	—	—	—	—	—	—	—	—	—	1	—	1	—	—	76	67
2–	2	2	—	—	—	—	—	—	—	1	—	—	—	1	38	34
3–	—	—	—	—	—	—	—	—	—	1	—	1	—	—	31	21
4–	—	—	1	1	—	—	—	—	—	—	—	—	—	—	15	15
5–	4	2	—	—	—	—	—	—	1	1	1	1	—	—	43	67
10–	2	2	—	—	—	—	—	—	9	—	9	—	—	—	39	35
15–	5	1	—	3	—	—	—	—	9	1	8	—	—	1	34	44
20–	1	—	—	—	—	—	—	—	5	2	5	1	—	1	41	32
25–	5	1	—	—	—	—	—	—	4	3	2	2	1	1	38	39
30–	1	—	—	—	—	—	—	—	2	1	1	1	1	—	30	24
35–	5	1	—	—	—	—	1	1	4	1	2	1	1	—	46	44
40–	1	2	1	1	—	—	—	2	3	3	2	3	1	—	56	61
45–	6	—	1	—	—	—	1	—	2	8	1	6	1	1	61	63
50–	6	2	—	—	1	1	1	1	2	5	1	4	—	1	36	55
55–	5	—	4	5	—	1	2	1	4	3	3	1	1	—	44	44
60–	2	5	8	10	1	—	—	—	8	6	7	4	1	1	38	42
65–	6	4	14	13	2	2	1	—	8	3	5	2	2	—	20	35
70–	4	3	16	12	1	6	—	—	4	3	3	1	—	2	12	25
75–	5	4	11	12	3	6	—	—	4	3	2	2	1	1	11	17
80–	4	—	4	7	2	4	—	—	1	—	1	—	—	—	5	4
85 and over	—	3	3	8	—	2	—	—	—	1	—	1	—	—	2	6

727b, Rheumatism unspecified, subacute, *5, 35, 55, 10, 10, 25, 25, 35, 45, 55, 70*; **732,** Osteochondrosis, —; **734,** Internal derangement of knee joint, 40; **736,** Affection of sacro-iliac joint, 70, *60*; **737,** Ankylosis of joint, *25, 60, 70*; **738,** Other diseases of joint, *50, 65, 65, 85*; **740,** Bunion, 50, 65; **741,** Synovitis, bursitis and tenosynovitis without mention of occupational origin, 70, 75, *55, 55*; **742,** Synovitis, bursitis, and tenosynovitis of occupational origin, —; **743,** Infective myositis and other inflammatory diseases of tendon and fascia, *65*; **746,** Flat foot, —; **747,** Hallux valgus and varus, *45, 60*; **748,** Club foot, 0, 0, 0; **749,** other deformities, 15, 25.

TABLE 3.—(*contd.*)

Causes of death	750 Monstrosity		751 Spina bifida and meningocele		752 Congenital hydrocephalus		753 Other congenital malformations of nervous system and sense organs		754 Congenital malformations of circulatory system		755 Cleft palate and harelip		756 Congenital malformations of digestive system		756.0 Congenital hypertrophic pyloric stenosis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**32**	**43**	**350**	**549**	**115**	**112**	**48**	**60**	**1044**	**923**	**25**	**24**	**458**	**245**	**152**	**3**
0–	31	42	326	517	85	79	24	29	652	457	23	20	382	191	150	3
1–	—	—	6	11	11	11	6	8	32	27	1	3	10	4	1	—
2–	—	—	3	3	3	1	2	5	23	17	—	—	3	4	—	—
3–	—	1	2	1	2	3	4	1	13	13	1	—	7	2	1	—
4–	—	—	1	—	1	2	1	1	6	11	—	—	2	1	—	—
5–	—	—	1	7	5	10	4	4	22	36	—	—	6	4	—	
10–	—	—	1	3	1	—	3	1	25	27	—	—	3	1	—	
15–	—	—	3	4	3	1	1	3	24	26	—	1	1	4	—	—
20–	1	—	1	1	1	1	—	2	31	25	—	—	3	1	—	—
25–	—	—	—	—	1	—	1	1	26	33	—	—	3	—	—	—
30–	—	—	—	—	—	1	—	—	22	15	—	—	2	2	—	—
35–	—	—	2	1	—	—	1	—	28	29	—	—	3	3	—	—
40–	—	—	1	1	1	2	—	2	28	33	—	—	4	3	—	—
45–	—	—	—	—	—	—	1	—	33	36	—	—	5	7	—	
50–	—	—	—	—	1	—	—	—	17	29	—	—	3	2	—	—
55–	—	—	1	—	—	—	—	—	25	26	—	—	3	1	—	—
60–	—	—	—	—	—	1	—	3	21	25	—	—	4	3	—	—
65–	—	—	2	—	—	—	—	—	9	24	—	—	5	4	—	—
70–	—	—	—	—	—	—	—	—	3	17	—	—	3	3	—	—
75–	—	—	—	—	—	—	—	—	2	11	—	—	4	2	—	—
80–	—	—	—	—	—	—	—	—	2	1	—	—	—	2	—	—
85 and over	—	—	—	—	—	—	—	—	—	5	—	—	2	1	—	—

Causes of death	756.1 Imperforate anus		756.2 Others included in 756		757 Congenital malformations of genito-urinary system		757.1 Polycystic disease of kidney		757.0; 2; 3 Others included under 757		758 Congenital malformations of bone and joint		759 Other and unspecified congenital malformations, not elsewhere classified		XV 760–776* Certain diseases of Early Infancy	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**24**	**4**	**282**	**208**	**197**	**150**	**104**	**110**	**93**	**40**	**15**	**23**	**122**	**109**	**7043**	**47**
0–	24	3	208	158	68	37	11	12	57	25	9	14	90	78	7043	47
1–	—	—	9	4	4	1	—	1	4	—	2	—	4	2	—	
2–	—	1	3	3	—	—	—	—	—	—	—	1	4	3	—	
3–	—	—	6	2	—	—	—	—	—	—	—	—	2	—	—	
4–	—	—	2	1	3	—	1	—	2	—	—	—	1	—	—	
5–	—	—	6	3	4	3	1	1	3	2	1	2	—	1	—	
10–	—	—	3	—	6	1	1	1	5	—	—	1	—	1	—	
15–	—	—	1	4	1	5	—	1	1	4	1	—	—	—	—	
20–	—	—	3	1	2	1	1	—	1	1	—	1	2	—	—	
25–	—	—	3	—	6	3	1	3	5	—	—	—	1	2	—	
30–	—	—	2	2	4	2	—	2	4	—	—	3	2	1	—	
35–	—	—	3	3	10	8	8	6	2	2	1	—	1	3	—	
40–	—	—	4	3	17	17	14	16	3	1	—	—	5	3	—	
45–	—	—	5	6	19	14	17	13	2	1	—	—	3	6	—	
50–	—	—	3	2	13	20	12	19	1	1	—	—	2	4	—	
55–	—	—	3	1	14	13	13	12	1	1	—	1	1	3	—	
60–	—	—	4	3	11	9	10	9	1	—	—	—	2	1	—	
65–	—	—	5	4	1	6	1	5	—	1	1	—	2	1	—	
70–	—	—	3	3	6	5	6	4	—	1	—	—	—	—	—	
75–	—	—	4	2	5	4	4	4	1	—	—	—	—	—	—	
80–	—	—	—	2	3	1	3	1	—	—	—	—	—	—	—	
85 and over	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	

* *Note.*—The group 760–776 relates particularly to the causes of death within the first 28 days of life, but it includes also so deaths from the causes specified at all ages.

TABLE 3.—(*contd.*)

Causes of death	760–769 Birth injuries, asphyxia, and infections of newborn		760 Intracranial and spinal injury at birth		761 Other birth injury		762 Postnatal asphyxia and atelectasis		763 Pneumonia of newborn		764 Diarrhœa of newborn		765* / 766 Pemphigus neonatorum		767 Umbilical sepsis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**3393**	**2207**	**943**	**534**	**261**	**177**	**1413**	**989**	**521**	**337**	**118**	**76**	**3**	**4**	**19**	**7**
0–	3393	2206	943	534	261	177	1413	988	521	337	118	76	3	4	19	7
1–	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	768 Other sepsis of newborn		769 Neonatal disorders arising from maternal toxæmia		770–776 Other diseases peculiar to early infancy		770 Hæmolytic disease of newborn (erythro-blastosis)		771 Hæmorrhagic disease of newborn		772 Nutritional mal-adjustment		773 Ill-defined diseases peculiar to early infancy		774 Immaturity with mention of any other subsidiary condition	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**15**	**10**	**100**	**73**	**3650**	**2589**	**321**	**231**	**108**	**68**	**14**	**12**	**320**	**190**	**1087**	**789**
0–	15	10	100	73	3650	2589	321	231	108	68	14	12	320	190	1087	789
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
40–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
50–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
55–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
60–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* **765,** Ophthalmia neonatorum, —.

TABLE 3.—(*contd.*)

Causes of death	776 Immaturity unqualified		XVI 780–795 **Symptoms, Senility, and Ill-defined Conditions**		780–789 Symptoms referable to systems or organs		780 Certain symptoms referable to nervous system and special senses		780.2 Convulsions		780.0; 1; 3; 4; 5; 6; 7; 8; 9 Others included under 780		781* 782 Symptoms referable to cardio-vascular and lymphatic system		782.4 Acute hear failure, undefined	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**1800**	**1299**	**4919**	**7936**	**243**	**210**	**77**	**68**	**77**	**64**	—	**4**	**107**	**92**	**92**	**81**
0–	1800	1299	**87**	**61**	82	61	64	54	64	54	—	—	4	—	3	—
1–	—	—	**11**	**7**	11	7	10	7	10	7	—	—	—	—	—	—
2–	—	—	**3**	**1**	2	1	1	1	1	1	—	—	—	—	—	—
3–	—	—	**1**	**1**	1	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	**1**	**2**	1	2	1	2	1	2	—	—	—	—	—	—
5–	—	—	**1**	**1**	1	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	**2**	—	1	—	—	—	—	—	—	—	1	—	—	—
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20–	—	—	**5**	**2**	3	2	—	—	—	—	—	—	3	1	2	1
25–	—	—	**1**	**2**	1	1	—	—	—	—	—	—	1	1	—	1
30–	—	—	—	**1**	—	1	—	—	—	—	—	—	—	1	—	—
35–	—	—	**9**	**1**	7	—	—	—	—	—	—	—	6	—	5	—
40–	—	—	**7**	**7**	2	4	—	2	—	—	—	2	—	1	—	1
45–	—	—	**8**	**7**	1	5	—	2	—	—	—	2	—	2	—	2
50–	—	—	**15**	**9**	13	6	—	—	—	—	—	—	7	3	5	3
55–	—	—	**21**	**12**	15	9	—	—	—	—	—	—	14	5	12	5
60–	—	—	**24**	**15**	17	9	—	—	—	—	—	—	14	7	12	6
65–	—	—	**79**	**86**	16	13	—	—	—	—	—	—	8	11	7	10
70–	—	—	**414**	**525**	22	17	1	—	1	—	—	—	13	12	12	9
75–	—	—	**999**	**1281**	23	27	—	—	—	—	—	—	16	21	16	19
80–	—	—	**1545**	**2372**	16	25	—	—	—	—	—	—	14	18	12	15
85 and over	—	—	**1686**	**3543**	8	20	—	—	—	—	—	—	6	9	6	9

Causes of death	782.0; 1; 2; 3; 5; 6; 7; 8; 9 Others included under 782		783 Symptoms referable to respiratory system		784 Symptoms referable to upper gastro-intestinal tract		785 Symptoms referable to abdomen and lower gastro-intestinal system		786 Symptoms referable to genito-urinary system		787, 788, 789* 790–795 Senility and ill-defined diseases		790, 791* 792 Uræmia unqualified		793* 794 Senility without mention of psychosis	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**15**	**11**	**8**	—	**21**	**11**	**14**	**23**	**13**	**9**	**4676**	**7726**	**63**	**38**	**4567**	**7666**
0–	1	—	2	—	4	—	5	4	—	—	5	—	1	—	—	—
1–	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—
10–	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
15–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20–	1	—	—	—	—	1	—	—	—	—	2	—	—	—	—	—
25–	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
30–	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35–	1	—	—	—	—	—	—	—	1	—	2	1	—	—	—	—
40–	—	—	1	—	—	1	1	—	—	—	5	3	—	2	—	—
45–	—	—	—	—	1	—	—	—	—	1	7	2	—	2	—	—
50–	2	—	1	—	2	1	1	2	2	—	2	3	—	1	—	—
55–	2	—	1	—	—	3	—	1	—	—	6	3	2	2	2	—
60–	2	1	1	—	1	—	1	—	—	1	7	6	2	1	3	2
65–	1	1	1	—	5	—	2	2	—	—	63	73	5	2	48	69
70–	1	3	1	—	3	2	—	2	4	—	392	508	11	3	378	501
75–	—	2	—	—	2	—	2	3	3	2	976	1254	15	7	956	1244
80–	2	3	—	—	—	2	1	2	1	2	1529	2347	16	9	1513	2336
85 and over	—	—	—	—	1	1	—	7	1	3	1678	3523	11	9	1667	3514

* **781,** Other symptoms referable to nervous system and special senses, —; **787,** Symptoms referable to limbs and back, —; **788,** Other general symptoms, 0, 0, 0, *0, 0, 0, 60, 70, 80* ; **789,** Abnormal urinary constituents of unspecified cause, *75* ; **790,** Nervousness and debility, *50, 65, 75* ; **791,** Headache, *80* ; **793,** Observation, without need for further medical care, —.

TABLE 3.—(*contd.*)

Causes of death	795 Ill-defined and unknown causes of mortality		XVII E800-E999 Accidents, Poisonings, and Violence (External Cause)		RAILWAY ACCIDENTS								M. V. TRAFFIC ACCS.			
					E800–E802 Railway accidents		E800 involving railroad employee		E801 involving passenger		E802 involving other and unspecified person		E810–E825 Motor vehicle traffic accidents		E810 involving collision with railway train	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**46**	**18**	**11712**	**6801**	**329**	**29**	**181**	**4**	**27**	**5**	**121**	**20**	**2841**	**923**	**4**	—
0–	4	—	**513**	**376**	—	—	—	—	—	—	—	—	1	3	—	—
1–	—	—	**126**	**88**	—	—	—	—	—	—	—	—	35	23	—	—
2–	1	—	**138**	**101**	—	—	—	—	—	—	—	—	56	27	—	—
3–	—	1	**130**	**67**	1	—	—	—	—	—	1	—	50	30	—	—
4–	—	—	**120**	**49**	5	—	—	—	2	—	3	—	52	24	—	—
5–	—	1	**453**	**186**	11	—	—	—	2	—	9	—	227	105	—	—
10–	1	—	**277**	**88**	6	—	—	—	—	—	6	—	114	44	—	—
15–	—	—	**473**	**111**	4	1	3	—	—	—	1	1	176	45	—	—
20–	2	—	**694**	**136**	21	2	9	1	1	1	11	—	320	43	—	—
25–	—	1	**650**	**127**	22	1	14	—	1	—	7	1	213	18	—	—
30–	—	—	**510**	**137**	19	1	10	—	2	—	7	1	137	15	1	—
35–	2	1	**690**	**203**	22	2	17	—	—	1	5	1	174	29	—	—
40–	5	1	**735**	**230**	32	2	21	—	—	—	11	2	156	26	1	—
45–	7	—	**820**	**300**	36	1	21	—	3	—	12	1	142	30	—	—
50–	2	1	**763**	**346**	37	2	26	—	3	—	8	2	128	38	—	—
55–	2	1	**782**	**386**	46	3	30	—	5	—	11	3	134	48	—	—
60–	2	3	**832**	**436**	27	1	25	—	1	1	1	—	143	61	—	—
65–	10	1	**751**	**506**	13	4	4	1	3	1	6	2	172	80	2	—
70–	3	4	**742**	**605**	11	2	1	—	1	—	9	2	144	93	—	—
75–	5	2	**707**	**772**	11	6	—	1	2	1	9	4	144	86	—	—
80–	—	1	**488**	**769**	5	1	—	1	1	—	4	—	94	38	—	—
85 and over	—	—	**318**	**782**	—	—	—	—	—	—	—	—	29	17	—	—

Causes of death	MOTOR VEHICLE TRAFFIC ACCIDENTS															
	E811* E812 to pedestrian		E813 to pedal cyclist		E814 to rider or passenger of motorcycle, in collision with non-motor vehicle or object		E815 to rider or passenger of motorcycle, in collision with other motor vehicle		E816 Other motor vehicle traffic accident involving two or more motor vehicles		E817* E818 involving collision with animal or animal-drawn vehicle		E819 involving collision with fixed or unspecified object		E820 while boarding and alighting	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**1205**	**674**	**490**	**78**	**130**	**12**	**425**	**32**	**190**	**53**	**7**	—	**62**	**13**	**20**	**10**
0–	1	2	—	—	—	—	—	—	—	1	—	—	—	—	—	—
1–	33	21	—	—	—	—	—	—	1	—	—	—	—	—	—	—
2–	52	26	1	—	—	—	—	1	—	—	—	—	—	—	—	—
3–	46	27	2	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	43	24	2	—	—	—	1	—	1	—	—	—	—	—	—	—
5–	180	94	25	7	—	—	1	—	2	2	1	—	1	—	—	—
10–	39	24	63	16	—	—	1	—	—	1	1	—	3	—	—	—
15–	21	12	67	18	11	4	50	4	5	4	—	—	2	—	—	—
20–	22	5	29	12	47	6	122	6	22	2	—	—	11	1	—	—
25–	26	4	26	1	22	1	69	3	19	4	—	—	6	1	1	—
30–	25	3	14	4	12	—	38	3	16	4	1	—	7	—	—	—
35–	33	10	25	2	13	—	50	6	22	7	—	—	4	3	2	—
40–	35	9	23	4	9	1	34	5	14	2	—	—	8	2	2	1
45–	47	20	20	3	7	—	23	1	20	3	1	—	7	1	1	—
50–	42	24	30	6	5	—	16	2	13	3	2	—	5	1	—	—
55–	53	35	37	1	1	—	9	1	23	8	—	—	1	—	2	1
60–	77	46	39	2	2	—	7	—	9	6	1	—	3	1	—	1
65–	102	72	40	2	1	—	2	—	11	2	—	—	2	—	3	—
70–	103	88	23	—	—	—	1	—	6	—	—	—	1	1	4	2
75–	118	78	13	—	—	—	1	—	6	2	—	—	1	2	2	3
80–	80	36	10	—	—	—	—	—	—	1	—	—	—	—	2	1
85 and over	27	14	1	—	—	—	—	—	—	1	—	—	—	—	1	1

***E811,** Motor vehicle traffic accident involving collision with street car, 30 ; **E817,** Motor vehicle traffic accident to occupant of otor vehicle in collision with pedestrian or pedal cycle, *1.*

TABLE 3.—(*contd.*)

Causes of death	MOTOR VEHICLE TRAFFIC ACCIDENTS										M. V. NON-TRAFFIC ACC.					
	E821 to rider of motor cycle not involving collision		E822 involving overturning in roadway		E823 involving running off roadway		E824 Other non-collision motor vehicle traffic accident		E825 of unspecified nature		E830–E835 Motor vehicle non-traffic accidents		E830 to pedestrian		E831* E832 to rider or passenger o motor cycle	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**133**	**12**	**48**	**8**	**21**	**4**	**104**	**26**	**1**	—	**69**	**3**	**13**	**2**	**6**	—
0–	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—
1–	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	3	—	—	—	1	—	1	—	—	—
3–	—	—	—	—	—	—	2	3	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	5	—	—	—	2	—	—	—	—	—
5–	—	—	—	—	—	1	17	1	—	—	6	2	2	1	—	—
10–	—	—	1	—	—	—	6	3	—	—	5	—	—	—	—	—
15–	10	1	—	1	2	—	8	1	—	—	6	—	—	—	2	—
20–	47	6	8	1	4	—	8	4	—	—	11	—	3	—	—	—
25–	29	1	6	2	5	—	4	1	—	—	6	—	—	—	—	—
30–	11	1	2	—	4	—	5	—	—	—	6	—	1	—	1	—
35–	16	—	6	—	1	—	2	1	—	—	10	—	1	—	2	—
40–	10	1	8	1	3	—	8	—	1	—	3	—	—	—	—	—
45–	6	1	7	—	—	—	3	1	—	—	3	—	—	—	1	—
50–	1	—	4	—	—	—	10	2	—	—	1	—	1	—	—	—
55–	1	1	2	—	—	—	5	1	—	—	—	—	—	—	—	—
60–	1	—	1	1	2	1	1	3	—	—	3	1	1	1	—	—
65–	1	—	2	1	—	—	6	3	—	—	3	—	1	—	—	—
70–	—	—	—	—	—	1	6	1	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	1	3	—	—	—	2	—	1	—	—	—
80–	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	M. V. NON-TRAFFIC ACCIDENT E833, E834* E835 of other and unspecified nature		E840–E845 Other road vehicle accidents		E840 Street car accident to pedestrian		E841* E842 Accident to pedestrian caused by pedal cycle		E843 Accident to rider of pedal cycle not involving collision with motor vehicle		E844 Accident to pedestrian caused by other non-motor road vehicle		E845 Other non-motor road vehicle accidents		E850–E85 Water transport accidents	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**49**	**1**	**251**	**88**	**11**	**13**	**43**	**34**	**152**	**30**	**13**	**4**	**25**	**4**	**142**	
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	3	1	1	—	—	—	—	—	1	1	1	—	—	
3–	—	—	4	—	—	—	2	—	—	—	2	—	—	—	—	
4–	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	3	1	10	3	—	—	2	1	5	—	—	—	3	2	2	—
10–	5	—	9	2	—	—	1	1	7	1	—	—	1	—	6	
15–	4	—	34	7	—	—	1	—	30	7	1	—	2	—	20	—
20–	8	—	15	4	—	—	—	—	13	2	—	—	2	1	20	
25–	6	—	16	1	—	—	—	—	16	1	—	—	—	—	15	—
30–	4	—	10	4	—	—	—	1	9	3	—	—	—	—	6	
35–	7	—	14	3	—	1	—	—	8	2	1	—	5	—	12	
40–	3	—	7	2	—	—	1	—	5	2	—	—	1	—	16	—
45–	2	—	19	3	—	—	2	—	13	1	—	—	3	1	15	
50–	—	—	10	7	3	1	—	2	4	4	2	—	—	—	9	—
55–	—	—	12	9	—	1	4	5	7	2	1	—	—	—	9	—
60–	2	—	24	11	2	1	3	7	16	2	1	1	1	—	5	—
65–	2	—	22	9	1	—	8	7	7	2	2	—	3	—	5	—
70–	—	—	13	6	2	4	5	2	3	—	1	—	1	—	1	—
75–	1	—	18	7	—	3	9	2	7	1	—	1	2	—	1	—
80–	—	—	7	6	2	1	4	4	1	—	—	1	—	—	—	—
85 and over	—	—	4	3	—	1	1	2	1	—	1	—	—	—	—	—

* **E831,** Motor vehicle non-traffic accident to pedal cyclist, — ; **E833,** Other motor vehicle non-traffic accident involving two more motor vehicles, — ; **E834,** Motor vehicle non-traffic accident while boarding and alighting, 5 ; **E841,** Other street-car ac dent, except collision with motor vehicle, 30, 45, 50, 60, 65, 70, 85, *20, 45, 55.*

TABLE 3.—(*contd.*)

Causes of death	E850 Submersion of occupant of small boat		E851 Other water transport injury by submersion		E852 Fall on stairs and ladders in water transport		E853 Other falls from one level to another in water transport		E854, E855* E856 Machinery accident in water transport		E857 Other specified accidents in water transport		E858* E860–E866 Aircraft accidents		E860 Accident to personnel in military aircraft	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**48**	**4**	**33**	**2**	**7**	—	**28**	**1**	**8**	—	**16**	**2**	**76**	**19**	**11**	—
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
2–	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	1	—	—	—	—	—	—	—	—	—	1	1	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
10–	6	—	—	1	—	—	—	—	—	—	—	—	—	3	—	—
15–	17	—	2	—	—	—	—	—	—	—	1	—	3	3	1	—
20–	9	—	6	—	—	—	3	—	—	—	2	1	10	1	6	—
25–	2	—	7	—	—	—	4	—	1	—	1	—	16	—	3	—
30–	—	1	1	—	—	—	1	—	3	—	1	—	10	—	—	—
35–	3	1	—	—	1	—	3	—	1	—	3	—	11	2	1	—
40–	1	—	5	—	—	—	7	—	1	—	2	—	12	1	—	—
45–	3	—	6	1	1	—	2	1	1	—	2	—	6	5	—	—
50–	—	—	1	—	3	—	2	—	1	—	2	—	3	1	—	—
55–	2	—	2	—	—	—	4	—	—	—	1	—	2	1	—	—
60–	1	—	—	—	2	—	1	—	—	—	1	—	1	—	—	—
65–	1	—	3	—	—	—	1	—	—	—	—	—	—	—	—	—
70–	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of death	E861 Injury to occupant by accident to commercial "transport" aircraft		E862* E863 Injury to occupant by accident to other aircraft		ACCIDENTAL POISONING E864, E865, E866* E870–E888 Accidental poisoning by solid and liquid substances		E870* E871 By barbituric acid and derivatives		E872 By aspirin and salicylates		E873* E874 By other analgesic and soporific drugs		E875, E876, E877* E878 By other and unspecified drugs		E879* E880 By alcohol	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**34**	**14**	**18**	—	**93**	**101**	**27**	**50**	**10**	**17**	**8**	**8**	—	**4**	**5**	—
0–	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
1–	1	—	—	—	7	6	—	—	1	1	—	—	—	1	—	—
2–	—	—	—	—	5	6	—	1	—	3	—	—	—	—	—	—
3–	1	—	—	—	2	2	—	—	—	—	—	1	—	1	—	—
4–	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
5–	—	1	—	—	5	—	—	—	—	—	—	—	—	—	—	—
10–	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15–	1	2	1	—	1	1	—	1	—	—	—	—	—	—	—	—
20–	1	1	1	—	2	5	1	2	—	—	—	1	—	—	—	—
25–	5	—	5	—	7	5	2	3	2	—	—	1	—	—	2	—
30–	5	—	3	—	8	2	4	1	—	—	1	—	—	—	—	—
35–	6	2	3	—	4	7	1	4	—	3	2	—	—	—	—	—
40–	7	1	2	—	7	5	3	3	—	—	—	—	—	1	—	—
45–	2	4	2	—	10	10	5	7	1	—	2	—	—	1	—	—
50–	2	—	1	—	7	11	1	7	1	1	2	2	—	—	—	—
55–	2	1	—	—	3	10	1	7	—	2	1	1	—	—	—	—
60–	1	—	—	—	6	7	4	2	1	3	—	1	—	—	1	—
65–	—	—	—	—	9	9	4	5	1	3	—	—	—	—	2	—
70–	—	—	—	—	4	9	—	6	2	1	—	—	—	—	—	—
75–	—	—	—	—	3	3	—	—	1	—	—	—	—	—	—	—
80–	—	—	—	—	—	2	—	1	—	—	—	1	—	—	—	—
85 and over	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—

* **E854,** Falls on same level in water transport, 35 ; **E855,** Unspecified falls in water transport, 75 ; **E858,** Water transport accident of unspecified cause, — ; **E862,** Other injury in commercial " transport " aircraft, 40 ; **E864,** Aircraft accident at airfield to person not in aircraft, 25, 40, 45 ; **E865,** Aircraft accident elsewhere to person not in aircraft, 25, *5, 10, 15, 45, 50* ; **E866,** Other and unspecified aircraft accidents, 20, 20, 25, 30, 30, 35, 40, 45 ; **E870,** Accidental poisoning by morphine and other opium derivatives, 40, 65, *75* ; **E873,** Accidental poisoning by bromides, — ; **E875,** Accidental poisoning by sulphonamides, 20, *1, 1* ; **E876,** Accidental poisoning by strychnine, 1, 5, 30, *2, 2* ; **E877,** Accidental poisoning by belladonna, hyoscine, and atropine, 3, 5, 40, 55, 75 ; **E879** Accidental poisoning by noxious foodstuffs, —.

TABLE 3.—(*contd.*)

Causes of death	ACCIDENTAL POISONING															
	E881, E882* E883 By corrosive aromatics, acids, and caustic alkalis		E884–E887* E888 By other and unspecified solid and liquid substances		E890–E895 Accidental poisoning by gases and vapours		E890 By utility (illuminating) gas		E891 By motor vehicle exhaust gas		E892 By other carbon monoxide gas		E893* E894 By other specified gases and vapours		E895* E900–E904 Accidental falls	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**10**	**4**	**15**	**12**	**229**	**235**	**195**	**226**	**7**	**1**	**13**	**2**	**9**	**4**	**1661**	**2365**
0–	—	—	—	—	—	1	—	—	—	—	—	—	—	1	10	6
1–	1	—	4	2	2	2	2	2	—	—	—	—	—	—	14	8
2–	2	—	3	—	1	1	1	1	—	—	—	—	—	—	8	7
3–	1	—	—	—	—	1	—	—	—	—	—	1	—	—	10	1
4–	1	—	—	—	3	1	2	—	—	1	1	—	—	—	9	1
5–	1	—	1	—	1	1	1	1	—	—	—	—	—	—	34	17
10–	—	—	—	—	2	—	1	—	—	—	—	—	—	—	26	8
15–	—	—	—	—	7	2	4	2	1	—	1	—	—	—	38	5
20–	—	—	—	2	7	4	6	3	—	—	—	—	1	—	41	2
25–	—	—	1	1	10	3	8	3	—	—	—	—	1	—	59	2
30–	—	—	—	1	10	—	8	—	—	—	—	—	—	—	40	4
35–	—	—	1	—	12	3	8	3	—	—	—	—	4	—	63	7
40–	1	1	1	—	14	3	11	3	1	—	2	—	—	—	55	11
45–	1	—	1	1	9	14	4	13	1	—	4	—	—	1	87	16
50–	1	—	1	1	11	7	8	7	1	—	2	—	—	—	65	29
55–	—	—	—	—	14	13	12	12	1	—	1	—	—	1	58	49
60–	—	—	—	1	29	18	26	18	1	—	—	—	2	—	86	77
65–	—	1	1	—	16	19	16	19	—	—	—	—	—	—	100	148
70–	—	1	1	1	22	32	20	32	1	—	1	—	—	—	163	269
75–	1	—	—	2	28	38	27	38	—	—	1	—	—	—	245	465
80–	—	—	—	—	21	51	20	40	—	—	—	1	1	1	231	557
85 and over	—	1	—	—	10	21	10	20	—	—	—	—	—	—	219	676

Causes of death	E900 Fall on stairs		E901 Fall from ladders		E902 Other falls from one level to another		E903 Fall on same level		E904 Unspecified falls		E910–E936 Other accidents		E910 Blow from falling object		E911 Accident caused by vehicle	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**290**	**463**	**81**	**10**	**614**	**355**	**509**	**1131**	**167**	**406**	**2801**	**1199**	**437**	**17**	**98**	—
0–	—	—	—	—	6	5	3	—	1	1	483	353	1	—	—	—
1–	1	1	—	—	10	5	1	2	2	—	65	45	—	1	—	—
2–	—	1	—	—	6	5	1	1	1	—	63	54	3	2	—	—
3–	—	—	—	—	9	—	1	—	—	1	58	29	2	1	—	—
4–	—	—	—	—	8	1	—	—	1	—	44	20	3	1	—	—
5–	—	—	—	—	26	15	6	2	2	—	155	52	9	3	—	—
10–	2	—	—	—	22	7	1	—	1	1	104	25	2	1	1	—
15–	—	1	3	—	31	4	3	—	1	—	143	20	7	1	4	—
20–	1	—	2	—	36	1	1	1	1	—	149	22	25	—	8	—
25–	5	—	6	—	40	2	6	—	2	—	144	21	44	—	7	—
30–	5	—	3	1	27	1	—	2	5	—	120	19	43	—	4	—
35–	3	—	5	—	50	7	5	—	—	—	160	21	50	—	7	—
40–	4	2	5	—	38	5	7	4	1	—	178	28	49	—	9	—
45–	14	7	6	1	52	4	8	3	7	1	174	31	63	1	15	—
50–	10	9	3	—	35	10	16	7	1	3	134	42	39	—	10	—
55–	10	18	11	3	29	12	8	9	—	7	134	44	49	—	14	—
60–	8	19	9	—	36	14	26	31	7	13	150	48	19	2	10	—
65–	21	47	9	—	32	14	32	64	6	23	100	57	16	—	6	—
70–	49	72	10	—	32	38	48	115	24	44	95	60	8	2	3	—
75–	56	92	6	5	31	47	120	243	32	78	76	76	2	—	—	—
80–	54	94	3	—	32	69	105	297	37	97	42	85	2	2	—	—
85 and over	47	100	—	—	26	89	111	350	35	137	30	47	1	—	—	—

* **E881,** Accidental poisoning by petroleum products, —; **E882,** Accidental poisoning by industrial solvents, 15, 30, 50
E884, Accidental poisoning by mercury and its compounds, 5; **E885,** Accidental poisoning by lead and its compounds, 30, 70, *45*
E886, Accidental poisoning by arsenic and antimony, and their compounds, 0; **E887,** Accidental poisoning by fluorides, —
E893, Accidental poisoning by cyanide gas, 25, *20*; **E895,** Accidental poisoning by unspecified gases and vapours, 10, 15, 30, 30, *8*

TABLE 3.—(*contd.*)

Causes of death	E912 Accident caused by machinery		E913 Accident caused by cutting and piercing instruments		E914 Accident caused by electric current		E915 Accident caused by explosion of pressure vessel		E916 Accident caused by fire and explosion of combustible material		E917 Accident caused by hotsubstance, corrosive liquid, and steam		E918* E919 Accident caused by firearm		E920* E921 Inhalation and ingestion of food causing obstruction or suffocation	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**198**	**7**	**16**	**2**	**68**	**21**	**19**	**2**	**191**	**367**	**80**	**89**	**84**	**7**	**241**	**169**
0–	—	—	1	—	—	1	—	—	9	9	10	6	1	—	173	127
1–	—	—	—	—	1	—	—	—	10	4	18	14	—	—	4	5
2–	—	—	—	1	1	2	—	—	7	9	8	19	1	—	4	3
3–	—	—	—	—	1	—	—	—	7	12	10	7	—	—	2	—
4–	—	—	—	—	2	—	—	—	7	12	3	2	—	—	—	—
5–	5	—	3	—	6	1	—	—	5	25	3	2	2	—	1	1
10–	4	—	1	—	3	1	1	—	5	4	—	—	3	1	2	1
15–	6	2	1	—	5	1	—	—	2	3	1	—	12	1	6	—
20–	13	2	2	—	9	—	1	—	5	9	—	—	8	—	1	1
25–	32	—	1	—	4	2	—	—	3	9	2	—	6	2	3	—
30–	20	—	1	1	9	1	4	—	5	7	2	—	2	1	1	1
35–	16	1	2	—	8	2	4	1	19	5	—	—	10	—	5	4
40–	32	—	2	—	7	1	3	—	8	9	3	—	11	1	7	2
45–	20	1	—	—	7	—	1	1	8	4	2	1	3	1	4	3
50–	17	—	—	—	3	1	2	—	6	17	2	2	6	—	5	3
55–	8	1	—	—	1	2	1	—	10	14	—	2	10	—	4	3
60–	16	—	1	—	1	1	1	—	7	26	2	2	7	—	7	—
65–	8	—	—	—	—	2	1	—	4	21	2	6	2	—	4	4
70–	1	—	—	—	—	—	—	—	15	31	1	5	—	—	4	4
75–	—	—	—	—	—	1	—	—	21	43	2	10	—	—	1	3
80–	—	—	—	—	—	2	—	—	12	59	8	7	—	—	1	3
85 and over	—	—	1	—	—	—	—	—	16	35	1	4	—	—	2	1

Causes of death	E922 Inhalation and ingestion of other object causing obstruction or suffocation		E923 Foreign body entering other orifice		E924 Accidental mechanical suffocation in bed and cradle		E925 Accidental mechanical suffocation in other and unspecified circumstances		E926 Lack of care of infants under 1 year of age		E927* E928 Other accidents caused by animals		E929 Accidental drowning and submersion		E930* E931 Excessive heat and insolation	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**21**	**15**	**17**	**22**	**210**	**138**	**30**	**10**	**65**	**65**	**28**	**5**	**822**	**185**	**10**	**5**
0–	7	2	1	—	203	127	8	5	65	65	—	—	2	6	1	—
1–	1	2	—	1	2	3	3	2	—	—	—	1	22	11	—	—
2–	1	1	1	—	1	—	—	2	—	—	—	1	35	13	—	—
3–	—	—	—	—	1	—	—	—	—	—	1	—	30	5	1	—
4–	—	—	—	1	—	—	—	—	—	—	—	—	28	4	—	—
5–	—	—	—	—	—	—	1	—	—	—	1	1	113	18	—	—
10–	—	—	—	1	—	—	6	—	—	—	—	—	61	14	—	—
15–	—	—	1	—	—	1	4	—	—	—	2	—	74	9	—	—
20–	—	2	—	1	—	—	2	—	—	—	1	1	63	3	1	—
25–	—	—	—	2	1	—	—	—	—	—	—	—	28	5	—	—
30–	1	—	—	1	1	—	—	—	—	—	2	—	19	4	—	—
35–	—	1	—	3	1	—	3	—	—	—	2	—	24	3	—	—
40–	—	1	—	1	—	1	—	—	—	—	2	—	32	8	—	—
45–	—	—	1	—	—	1	1	1	—	—	5	—	34	15	—	—
50–	1	—	2	1	—	1	1	—	—	—	2	—	31	11	2	1
55–	3	1	—	3	—	1	—	—	—	—	—	—	22	13	1	—
60–	3	1	3	—	—	1	—	—	—	—	2	—	58	12	2	—
65–	1	1	4	2	—	1	—	—	—	—	3	—	41	13	—	1
70–	1	2	1	2	—	—	1	—	—	—	4	—	46	9	1	—
75–	1	1	3	2	—	—	—	—	—	—	—	—	41	6	1	—
80–	—	—	—	—	—	1	—	—	—	—	1	1	10	3	—	—
85 and over	1	—	—	1	—	—	—	—	—	—	—	—	8	—	—	3

* **E918,** Accident caused by radiation, — ; **E920,** Foreign body entering eye and adnexa, 40 ; **E927,** Accidents caused by bites and tings of venomous animals and insects, 40, 70, *0, 20, 50, 55, 55, 65, 65, 70* ; **E930,** High and low air pressure, 25.

(55588) M4

TABLE 3.—(*contd.*)

Causes of death	E932 Excessive cold		E933 Hunger, thirst, and exposure		E934* E935 Lightning		E936 Other and unspecified accidents		E940–E946* E940–E946 Complications due to non-therapeutic medical and surgical procedures		E950–E959 Therapeutic misadventure and late complications of therapeutic procedures		E950 Therapeutic misadventure in surgical treatment		E951, E952* E953 Therapeutic misadventure in administration of drugs or biologicals	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**4**	**2**	**16**	**8**	**9**	**3**	**132**	**49**	**6**	**6**	**1**	**5**	—	—	**1**	**1**
0–	—	—	—	—	—	—	1	4	1	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	4	1	1	1	—	—	—	—	—	—
2–	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	3	4	2	1	—	—	—	—	—	—
4–	—	—	—	—	—	—	1	—	—	—	1	—	—	—	1	—
5–	—	—	—	—	—	—	6	1	—	—	—	—	—	—	—	—
10–	—	—	—	—	1	—	14	2	—	—	—	—	—	—	—	—
15–	—	—	1	—	3	—	14	1	—	—	—	—	—	—	—	—
20–	—	—	—	—	—	1	10	1	—	1	—	—	—	—	—	—
25–	1	—	2	—	—	—	9	1	1	2	—	3	—	—	—	1
30–	—	—	—	—	—	1	6	2	—	—	—	—	—	—	—	—
35–	—	—	1	—	1	1	7	—	—	1	—	1	—	—	—	—
40–	—	—	2	1	2	—	7	3	1	—	—	—	—	—	—	—
45–	—	—	—	—	—	—	9	2	—	—	—	—	—	—	—	—
50–	—	—	—	3	1	—	4	—	—	—	—	1	—	—	—	—
55–	1	—	2	—	—	—	8	2	—	—	—	—	—	—	—	—
60–	1	—	3	1	—	—	7	1	—	—	—	—	—	—	—	—
65–	—	—	—	—	1	—	7	4	—	—	—	—	—	—	—	—
70–	—	—	1	2	—	—	7	2	—	—	—	—	—	—	—	—
75–	1	2	1	1	—	—	2	7	—	—	—	—	—	—	—	—
80–	—	—	3	—	—	—	5	7	—	—	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—

Causes of death	E954–E959* E960–E965 Late effects of injury and poisoning		E960 Late effect of motor vehicle accident		E961* E962 Late effect of other accidental injury		E963, E964* E965 Late effects of injuries due to war operations		E970–E979 Suicide and self-inflicted injury		E970 Suicide and self-inflicted poisoning by analgesic and soporific substances		E971 Suicide and self-inflicted poisoning by other solid and liquid substances		E972 Suicide and self-inflicted poisoning by gases in domestic use	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**80**	**7**	**1**	**1**	**3**	**4**	**74**	**2**	**3023**	**1697**	**148**	**207**	**119**	**99**	**1081**	**852**
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10–	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	1
15–	—	—	—	—	—	—	—	—	38	21	1	2	1	3	18	12
20–	1	—	—	—	—	—	1	—	86	39	5	4	5	1	28	22
25–	3	—	—	—	—	—	3	—	127	65	9	14	7	4	37	30
30–	6	—	—	—	—	—	6	—	127	82	7	8	2	3	39	40
35–	3	—	1	—	—	—	2	—	201	116	15	16	6	11	78	51
40–	2	1	—	—	—	—	1	1	247	147	12	18	14	8	85	74
45–	2	—	—	—	—	—	2	—	315	181	19	19	13	19	126	85
50–	18	—	—	—	1	—	17	—	332	205	12	27	16	16	116	89
55–	21	—	—	—	1	—	20	—	337	205	24	29	14	9	119	91
60–	9	—	—	—	—	—	9	—	340	206	14	21	16	10	124	111
65–	7	2	—	—	—	1	6	1	302	169	12	19	9	7	100	99
70–	7	1	—	1	1	—	6	—	279	131	7	12	6	3	100	75
75–	1	1	—	—	—	1	1	—	177	86	8	12	4	3	64	52
80–	—	1	—	—	—	1	—	—	88	27	1	4	4	1	35	12
85 and over	—	1	—	—	—	1	—	—	25	16	2	2	2	1	12	8

* **E934,** Cataclysm, 45, *15, 50, 60* ; **E940,** Generalized vaccinia following vaccination, — ; **E941,** Postvaccinal encephalitis, 1 ; **E942,** Other complications of smallpox vaccination, — ; **E943,** Post-immunization jaundice and hepatitis, 3, 3, *3* ; **E944,** Other complications of prophylactic inoculation, 0, 40, *1* ; **E945,** Complications of anæsthesia for non-therapeutic purpose, *20, 25, 25, 35* ; **E946,** Other complications due to non-therapeutic medical and surgical procedures, 25 ; **E951,** Therapeutic misadventure in infusion or transfusion, *25, 50* ; **E952,** Therapeutic misadventure in local applications, — ; **E954,** Therapeutic misadventure in anæsthesia, *35* ; **E955,** Other and unspecified therapeutic misadventure, *25* ; **E956,** Late complication of surgical operation, — ; **E957,** Late complication of amputation stump, — ; **E958,** Late complication of irradiation, — ; **E959,** Late complications of other forms of treatment, — ; **E961,** Late effect of accidental poisoning, 65 ; **E963,** Late effect of self-inflicted injury, 40 ; **E964,** Late effect of injury purposely inflicted by another person (not in war), —.

Table 3.—(*contd.*)

Causes of death	E973 Suicide and self-inflicted poisoning by other gases		E974 Suicide and self-inflicted injury by hanging and strangulation		E975 Suicide and self-inflicted injury by submersion (drowning)		E976 Suicide and self-inflicted injury by firearms and explosives		E977 Suicide and self-inflicted injury by cutting and piercing instruments		E978 Suicide and self-inflicted injury by jumping from high place		E979 Suicide and self-inflicted injury by other and unspecified means		E980–E985 Homicide and injury purposely inflicted by other persons (not in war)	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**21**	—	**632**	**143**	**357**	**235**	**220**	**10**	**232**	**38**	**80**	**66**	**133**	**47**	**86**	**114**
0–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	13
1–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3
2–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4
3–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1
4–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
5–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	4
10–	—	—	1	—	1	—	—	—	—	—	—	—	—	—	3	4
15–	—	—	8	1	2	1	6	—	—	—	—	—	2	2	3	6
20–	1	—	18	3	8	5	7	—	2	—	6	3	6	1	11	12
25–	1	—	27	7	10	3	14	2	5	—	3	3	14	2	8	6
30–	2	—	38	12	15	10	11	—	4	1	3	2	6	6	9	9
35–	4	—	40	10	20	17	14	—	6	1	7	5	11	5	4	10
40–	2	—	46	13	25	16	33	3	13	1	1	6	16	8	5	4
45–	4	—	50	19	30	18	28	2	19	8	10	6	16	5	2	6
50–	1	—	75	13	40	39	24	—	25	6	8	11	15	4	5	3
55–	2	—	68	16	34	37	26	2	32	3	7	9	11	9	4	4
60–	2	—	80	18	37	33	18	—	33	6	4	6	12	1	4	6
65–	1	—	65	9	47	22	14	1	33	5	9	5	12	2	1	9
70–	—	—	56	14	47	16	13	—	31	7	11	3	8	1	1	2
75–	1	—	36	6	29	10	7	—	19	—	6	2	3	1	1	4
80–	—	—	18	2	11	4	5	—	8	—	5	4	1	—	—	1
85 and over	—	—	6	—	1	4	—	—	2	—	—	1	—	—	—	—

Causes of death	E980 Non-accidental poisoning by another person		E981 Assault by firearm and explosive		E982 Assault by cutting and piercing instruments		E983 Assault by other means		E984* E985 Execution		E990–E998* E990–E999 Injury resulting from operations of war		E999 Injury due to war operations but occurring after cessation of hostilities	
Ages at death	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Ages	**5**	**18**	**8**	**7**	**8**	**11**	**51**	**77**	**14**	**1**	**24**	**1**	**24**	—
0–	—	1	—	—	1	1	15	11	—	—	—	—	—	—
1–	—	2	—	—	—	—	1	1	—	—	—	—	—	—
2–	1	4	—	—	—	—	—	—	—	—	—	—	—	—
3–	1	—	—	—	—	—	1	1	—	—	—	—	—	—
4–	1	1	—	—	1	—	1	2	—	—	—	—	—	—
5–	2	3	—	—	—	—	—	1	—	—	—	—	—	—
10–	—	1	—	1	—	—	3	2	—	—	—	—	—	—
15–	—	1	—	—	—	—	3	5	—	—	—	—	—	—
20–	—	—	—	3	1	2	4	7	6	—	—	—	—	—
25–	—	—	1	1	3	—	2	5	2	—	3	—	3	—
30–	—	1	2	—	—	1	4	7	3	—	2	—	2	—
35–	—	1	2	—	—	4	1	5	1	—	—	—	—	—
40–	—	—	—	—	1	—	3	3	1	1	—	—	—	—
45–	—	—	1	—	—	—	—	6	1	—	—	1	—	—
50–	—	—	—	—	—	1	5	2	—	—	3	—	3	—
55–	—	—	1	—	—	1	3	3	—	—	8	—	8	—
60–	—	2	1	1	1	—	2	3	—	—	5	—	5	—
65–	—	1	—	1	—	1	1	6	—	—	1	—	1	—
70–	—	—	—	—	—	—	1	2	—	—	2	—	2	—
75–	—	—	—	—	—	—	1	4	—	—	—	—	—	—
80–	—	—	—	—	—	—	—	1	—	—	—	—	—	—
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* **E984,** Injury by intervention of police, —; **E990,** Injury due to war operations by gas and chemicals, —; **E991,** Injury due to war operations by gunshot, —; **E992,** Injury due to war operations by grenade and land mine, —; **E993,** Injury due to war operations by bomb, *45*; **E994,** Injury due to war operations by marine mine, depth charge, and torpedo, —; **E995,** Injury due to war operations by explosion of artillery shell, —; **E996,** Injury due to war operations by explosion of undetermined origin, —; **E997,** Injury due to war operations by aircraft destruction, —; **E998,** Injury due to war operations by other and unspecified means, —.

APPENDIX D.—NOTES ON THE WEATHER IN ENGLAND AND WALES DURING THE YEARS 1948 AND 1949

1948

The weather of the year, 1948, was distinguished by an exceptionally wet January, a warm and sunny spring, a cool, dull summer, apart from an exceptionally hot, sunny spell during the last week in July, a very mild November except during a notably prolonged spell of fog in eastern and central districts in the last nine days and a mild, sunny December, with a cold spell during the Christmas season. Heavy rains in thunderstorms caused serious flooding in some parts on August 2nd and 11th.

Mean temperature exceeded the average for the period 1906–35 by 1·2° F., the deviations for the districts ranging from +0·9° F. in the north-east to +1·4° F. in the south-east and south-west.

The table gives in degrees Fahrenheit the monthly deviation from the average temperature :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
+2·0	+0·8	+4·9	+2·4	+0·2	−0·4	−0·5	−0·9	+0·9	+0·5	+2·3	+2·0

March was exceptionally warm for the time of year ; apart from March 1938, it was the warmest March since before 1901. The coolness of the summer months was interrupted by an extremely hot spell during the last week in July. Temperature reached its peak at most places on the 28th or 29th and values of 90° F. or above were registered at numerous stations. The closing months, November and December were mild on the whole, the first half of December being exceptionally mild but it was cold at times in eastern districts and the Midlands during the foggy spell in the latter part of November, and the latter half of December was also mainly cold.

The extremes for the year were 95° F. at Milford, Surrey on July 28th, and 5° F. at East Malling on February 22nd.

The general precipitation expressed as a percentage of the average for the period 1881–1915 was 107. More than the average occurred over the greater part of the country and more than 130 per cent. of the average over small inland areas in north and south Wales and in a small area north-east of Salisbury. On the other hand less than the average was received over quite a large area in the east extending from the Tees to the Wash, over much of East Anglia and south-east England, at numerous places on the south coast, locally in Devon and Cornwall, in the Wirral and locally on the north coast of Wales. Less than 90 per cent. of the average occurred around Bradford, on the Yorkshire coast near Scarborough and locally in coastal areas from Cromer to Brighton.

The table gives the monthly rainfall expressed as a percentage of the average :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
234	73	54	96	117	151	62	134	113	75	66	114

January was the wettest January over England and Wales as a whole in a record which goes back to 1869. June and August were decidedly wet ; in August heavy rainstorms caused severe floods in some areas. September was very wet in Snowdonia and in the mountains of south Wales. On the other hand, March, July and November were considerably drier than the average.

Among the heaviest falls in 24 hours were 4·20 inches at Cwm Dyli, Snowdon on January 10, 4·28 inches at Thirlmere, Cumberland on March 31 and 4·62 inches at Berwick upon Tweed and 4·35 inches at Belford, Northumberland on August 12.

Thunderstorms were severe locally at times ; on April 19 two people were killed by lightning at Aldershot ; on May 1, after a heavy storm at White Waltham, Berkshire, hailstones lay to a depth of 6 inches on parts of the airfield ; on June 10 a man was killed by lightning at London Airport. In a severe thunderstorm in north-west England on July 31, houses and churches were struck by lightning at Southport and 1·67 inches of rain fell in 35 minutes at Hesketh Park. Heavy thundery rains in the Midlands and the north-east on August 11 and 12 caused severe floods.

Snow occurred widely on February 20–22, the falls being heaviest in the south-east ; level snow was 14 inches deep at Biggin Hill, 11½ inches at Wilmington and 10 inches at Croydon on the 22nd. On December 30, considerable snow occurred from Wales to the Humber ; it was 12 inches deep at Wirksworth, Derbyshire, 8 inches at Mansfield, Nottinghamshire and 6 inches at Shawbury, Shropshire.

The duration of bright sunshine was 101 per cent. of the 1906–35 average the percentages for the districts ranging from 100 in the east, north-west and Midland counties, to 105 in the south-east.

The table gives the monthly percentages of the average sunshine for the period 1906–35 :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
80	96	136	127	129	82	93	73	87	93	108	134

The outstanding features were the notably sunny spring and the generally dull summer. At a number of places in the east and south-east, April was the sunniest April for many years, while at numerous places in the west, May was the sunniest May on record, the mean daily sunshine exceeding 10 hours at some stations in the extreme south-west. In strong contrast June was the dullest June on record at Newquay, while at Oxford, the total sunshine was, with the exception of June 1909, the lowest since records began in 1881. July was dull until the 18th but the last six or seven days were unusually sunny. August was excessively dull, being the dullest on record locally in the north-west and the Midlands. Compared with the average the closing month was very sunny.

1949

From a meteorological standpoint the year 1949 was memorable ; it was exceedingly warm and notably dry and sunny. Among outstanding features were the exceptional warmth of April, the long warm spell from June 21 to mid-October, the dryness of the first three months and the period June to September inclusive, and the excessively wet October in the southern half of the country.

Mean temperature exceeded the average for the period 1906–35 by 2·2° F. The year was exceptionally warm, the mean temperature over the country as a whole reduced to mean sea level, 51·9° F., was the highest in a series going back to 1901, though 1921 gave a comparable value, namely 51·8° F. At a number of individual stations it was the warmest year in their long records ; for example at Oxford since 1815 and at Southport since 1871.

The table gives in degrees Fahrenheit the monthly deviation from the average :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
+2·1	+2·6	−0·7	+4·3	−0·2	+1·8	+2·6	+2·3	+5·4	+3·5	+0·9	+2·2

April, September and the first half of October were exceptionally warm. The maximum temperature, 84° F., registered at Greenwich on April 16 was the highest reading recorded there in April since records began in 1841. September was probably the warmest September since 1895; at Kew Observatory and Oxford the mean temperature was the highest for September in records going back to 1871 and 1815 respectively.

Extreme temperatures for the year included 92° F. at Worcester, on July 12 and 15° F. at Farnham on February 3, Goudhurst, Kent, on February 4 and Bramley, Surrey and Houghall, Durham, on February 5.

The general precipitation expressed as a percentage of the average for the period 1881–1915 was 88; it was the driest year over the country as a whole since 1933. More than the average occurred in the Lake District, locally in south Lancashire and the West Riding of Yorkshire, in an area extending across mid-Wales to Flint and West Cheshire and in one or two small isolated areas elsewhere. On the other hand less than 80 per cent. of the average was received over much of north-east and east England, the Thames Estuary and in some other scattered areas, while less than 70 per cent. was registered in the neighbourhood of Newcastle upon Tyne.

The table gives the monthly rainfall expressed as a percentage of the average :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
59	60	65	121	113	30	68	64	79	155	125	87

The months January to March were very dry, January being the driest January since 1911. The summer months June to September were also dry, though heavy falls of rain occurred during thunderstorms in July. April was wet on the whole, particularly in hilly districts in the west, for example the English Lake District and the Berwyn Mountains, where more than twice the average occurred. October was excessively wet, being the wettest October since the record wet month of 1903. Among heavy falls in 24 hours were :—

February	22.	3·20 inches at Borrowdale, Cumberland;
July	15.	4·12 inches at March, Cambridgeshire and 3·39 inches at Afon Rheidol, Cardiganshire;
July	17.	3·29 inches at Cannington, Somerset;
October	20.	3·41 inches at Balcombe, Sussex;
October	25.	4·03 inches at Snowdon and 3·63 inches at Princetown, Devon;
November	4.	3·50 inches at Cwm Dyli, Snowdon;
November	12.	3·44 inches at Troutbeck, Cumberland.

The thunderstorms of July 13–17 were severe and accompanied locally by heavy rainfall and considerable flooding; in the London area two boys were killed by lightning at Plumstead and two men at Walthamstow on the 16th and, on the same day, the Tower Bridge was struck by lightning.

Snow fell widely on March 5; it lay to a depth of 4 inches at Bolton on the 6th and 3 inches at Whipsnade on the 6th and 7th. Snow was fairly widespread on March 7–10 and level snow was 3 inches deep at Harrogate and 6 inches at Malham Tarn (1,297 ft. above mean sea level) on the 8th. In December most snow occurred from the 8th to 10th; level snow was 6½ inches deep at Lake Vyrnwy, Montgomeryshire, 6 inches at Cantref, Brecknockshire and 5 inches at Bellingham, Northumberland; there was considerable drifting on the Welsh hills.

The general sunshine expressed as a percentage of the average for the period 1906–35 was 117. At some stations in the south of England 1949 was the sunniest year on record, even at such stations as Kew Observatory and Oxford whose records go back to 1880 and 1881 respectively. The total sunshine amounted to more than 2,000 hours at approximately 40 stations in the south of England. The only months in which the sunshine did not exceed the average were March and November and even these months had 99 per cent. of the average. Compared with the average February and June were the sunniest months. February was the sunniest February on record at a number of stations with long records such as Kew Observatory, Oxford, Birmingham and Southport. In June a number of stations on the south coast from Plymouth to the Isle of Wight as well as Point of Ayre, Isle of Man, had a daily mean of 10 hours or more, while both Guernsey and Jersey had a daily mean of more than 11 hours.

The table gives the monthly percentages of the average for the period 1906–35 :—

Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
114	159	99	114	119	125	121	117	105	103	99	121

APPENDIX E.—Proportions of the Population of Children under 15 Years of Age at the end of 1949 who had been Immunised against Diphtheria, in different parts of England and Wales

The annual returns of immunisation for 1949, made to the Ministry of Health by the Medical Officers of Health of Counties and County Boroughs have been summarised and Table 1 shows the proportion immunised in the age groups 1–4 and 5–14 in each area as at 31st December, 1949.

In England and Wales as a whole in 1949 there was an improvement in the proportions immunised as compared with 1947. At ages 1–4 the proportion immunised rose from 57 to 62 per cent. and at ages 5–14 from 72 to 74 per cent.

The effect of the immunisation campaign can be seen from Table 2. The incidence of notified attacks of diphtheria at ages 1–4 was over four times as high in the unimmunised as in the immunised and at ages 5–14 it was five times as high. While it is true that attacks do occur in some of those who have been immunised at some time previously (it may be a long time ago) the real measure of protection lies in the fact that these attacks in the immunised are much milder on the whole than in the unimmunised. Out of 417 attacks in the immunised there were only 5 deaths, a fatality rate of 1·2 per cent. In the unimmunised there were 62 deaths in 909 cases, a fatality rate of 6·8 per cent. ; more than five times as high as in the immunised.

Table 1.—Proportions of Children at ages 1-4 and 5-14 years on 31st December, 1949, who had been Immunised against Diphtheria in each County and County Borough, according to the Returns made by Local Authorities to the Ministry of Health—England and Wales.

Area	Per cent. of population immunised prior to 31.12.49	
	1–4	5–14
Admin. Counties		
Bedfordshire	60	76
Berkshire	64	76
Buckinghamshire	62	70
Cambridgeshire	68	78
Cheshire	55	65
Cornwall	56	89
Cumberland	66	89
Derbyshire	59	81
Devon	66	70
Dorset	89	82
Durham	52	72
Ely, Isle of	34	7
Essex	62	73
Gloucestershire	57	78
Herefordshire	59	81
Hertfordshire	54	74
Huntingdonshire	62	73
Kent	67	73
Lancashire	58	73
Leicestershire	66	88
Lincs, Holland	69	91
Kesteven	67	68
Lindsey	55	56
London	66	68
Middlesex	64	74
Norfolk	57	75
Northamptonshire	61	85
Northumberland	68	86
Nottinghamshire	66	89
Oxfordshire	68	60
Peterborough, Soke of	48	71
Rutland	29	81
Shropshire	64	72
Somerset	75	69
Southampton	65	75
Staffordshire	49	74
Suffolk, East	66	27
West	60	52
Surrey	65	80
Sussex, East	74	83
West	51	83
Warwickshire	53	65
Westmorland	70	77
Wight, Isle of	53	71
Wiltshire	57	82
Worcestershire	61	74
Yorkshire, East Riding	60	57
North Riding	50	45
West Riding	56	65
ENGLAND Admin. Counties TOTAL	**61**	**72**
Anglesey	58	81
Brecknockshire	60	35
Caernarvonshire	71	70
Cardiganshire	79	92
Carmarthenshire	66	86
Denbighshire	70	92
Flintshire	62	80
Glamorganshire	68	88
Merionethshire	66	79
Monmouthshire	69	78
Montgomeryshire	79	93
Pembrokeshire	68	87
Radnorshire	49	66
WALES Admin. Counties TOTAL	**68**	**83**
ENGLAND and WALES Admin. Counties TOTAL	**62**	**73**

Table 1.—(*contd.*)

Area	Per cent. of population immunised prior to 31.12.49	
	1–4	5–14
County Boroughs		
Barnsley*	72	91*
Barrow in Furness	49	63
Bath	46	60
Birkenhead	45	57
Birmingham	79	98
Blackburn	56	91
Blackpool	52	98
Bolton	52	77
Bootle	55	71
Bournemouth	69	73
Bradford	48	58
Brighton	64	61
Bristol	64	72
Burnley	66	78
Burton-upon-Trent	56	96
Bury	54	73
Canterbury	64	61
Carlisle	82	83
Chester	54	89
Coventry	55	70
Croydon	59	70
Darlington	50	56
Derby	57	90
Dewsbury	56	70
Doncaster	45	61
Dudley	64	90
Eastbourne	63	68
East Ham	62	65
Exeter	73	82
Gateshead	47	66
Gloucester	51	70
Great Yarmouth	64	64
Grimsby	57	70
Halifax	45	43
Hastings	72	46
Huddersfield	80	80
Ipswich	59	86
Kingston-upon-Hull	71	63
Leeds	71	94
Leicester	57	87
Lincoln	59	91
Liverpool	47	75
Manchester	70	74
Middlesbrough	59	77
Newcastle-upon-Tyne	62	79
Northampton	59	79
Norwich	52	63
Nottingham	65	46
County Boroughs—*contd.*		
Oldham	†	†
Oxford	69	96
Plymouth	60	77
Portsmouth	73	80
Preston	66	84
Reading	72	76
Rochdale	54	95
Rotherham	54	77
St. Helens	54	78
Salford	93	93
Sheffield	72	87
Smethwick	64	95
Southampton	50	70
Southend-on-Sea	46	38
Southport	77	91
South Shields	69	83
Stockport	62	95
Stoke-on-Trent	64	57
Sunderland	55	46
Tynemouth	60	83
Wakefield	57	64
Wallasey	55	57
Walsall	44	90
Warrington	51	92
West Bromwich	64	82
West Ham	61	82
West Hartlepool	49	83
Wigan	53	71
Wolverhampton	46	76
Worcester	57	77
York	62	64
ENGLAND—County Boroughs—TOTAL	**62**	**76**
Cardiff	85	83
Merthyr Tydfil	59	91
Newport, Mon.	62	82
Swansea	57	90
WALES—County Boroughs TOTAL	**70**	**86**
ENGLAND and WALES—County Boroughs—TOTAL	**62**	**77**
ENGLAND and WALES	**62**	**74**

* Estimated after adjustment for migration (Barnsley C.B.).

† Not available (Oldham C.B.).

Table 2.—Comparative Rates of Diphtheria Notifications and Deaths in 1949, per 100,000 Children who were returned as having been Immunised and as not having been Immunised before the end of 1949—England and Wales.

	1–4	5–14	All ages under 15
Immunised			
Number of children	1,843,964	4,315,015	6,229,318
Number of notifications	119	296	417
Number of deaths	4	1	5
Rates :—			
Notified cases per 100,000	6	7	7
Deaths per 100 cases	3	0	1
Not Immunised			
Number of children	1,148,036	1,545,985	3,332,682
Number of notifications	324	556	909
Number of deaths	37	23	62
Rates :—			
Notified cases per 100,000	28	36	27
Deaths per 100 cases	11	4	7

APPENDIX F.—MEDICAL STATISTICS BRANCH OF THE GENERAL REGISTER OFFICE, 31st DECEMBER, 1949

Administrative :	S. G. Holloway (Assistant Secretary) R. M. Blaikley (Principal)
Professional :	P. Stocks, C.M.G., M.D., F.R.C.P. (Chief Medical Statistician) W. P. D. Logan, B.Sc., M.D., D.P.H. (Medical Statistician)
Executive :	Miss E. M. Brooke (Senior Executive Officer) C. E. Horton (Higher Executive Officer) H. G. Corbett (Higher Executive Officer).

APPENDIX G.—COMMITTEES* ON WHICH OFFICERS OF THE GENERAL REGISTER OFFICE SERVED DURING THE YEARS 1948 AND 1949

Accidents in the Home,
Standing Inter-Departmental Committee.

British Medical Association,
Clinical Sub-Committee on Nutrition.

Central Health Service Council,
Standing Cancer and Radiotherapy Advisory Committee, Sub-Committee on Cancer Records.

International Organizations Committee,
Population and Vital Statistics Working Party.

Medical Nomenclature and Statistics Advisory Committee.

Medical Research Council,
Statistics Committee.

Ministry of Health,
Hospital Records Sub-Committee.

Nuffield Hospital Provincial Trust,
Bureau of Health and Sickness Records Committee.

Population, Royal Commission on,
Biological and Medical Committee.

Rheumatism, Empire Council,
Scientific Advisory Committee.

Royal College of Physicians,
Nomenclature of Diseases Committee.
Prophit Executive Committee.

Royal Society of Medicine,
Epidemiology and State Medicine Section Council.

Royal Statistical Society Council.

World Health Organization,
Expert Committee for the Preparation of the Sixth Decennial Revision of the International Lists of Diseases and Causes of Death.

Expert Committee on Health Statistics.

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* A list of the committees on non-medical subjects will be published in the Registrar General's Statistical Review for the years 1946–50, Text, Volume II, Civil.

DISEASES AND CAUSES OF DEATH

INDEX

to this volume and the Parts I (Medical) of the Statistical Reviews for the years 1948 *and* 1949.

General Tables of the Parts I which contain all or most of the International List headings are as follow :—

Deaths :

	Table No.
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non-civilians	21A
All ages by sex (11 years)	6
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Death Rates :	
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These tables are not specified separately for each item of the index, but are denoted in groups by code letters as follow :—

Tables 6, 21 and 21A	a
,, 6, 21, 21A and 23	b
,, 6, 7, 21, 21A and 23	c

thus, an item which appears in the three tables, 6, 21 and 21A, is indicated by the letter "a" in the column headed "Part I Table No."

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Burns (conflagration excepted) (181)	—	c, 22, 25
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Cold, excessive (190)	—	b, 25
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Deaths : in houses, etc., 1940 to 1949	251	—
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Deaths : in houses, etc., 1940 to 1949	251	—
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Lack of care of newborn (195c) ..	—	b, 11, 12 22, 25
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Poisoning, poisonous gas (178) ..	—	c, 25
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Blood pressure, high (Idiopathic) (102)	—	c
Bones and organs of movement, diseases of (154–156)	—	c
Breast, diseases of (139c)	—	a
Brain and nervous system, neoplasms of (54, 56d, 57d)	167	—
Deaths : by sex and whether malignant, benign, or not stated, 1936 to 1949	168	—
Bronchitis (106)	—	c, 8, 11 12, 13A 15†, 22 24†
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	55	—

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.
‡ According to 6th (1948) Revision of International List.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Bronchitis (106)—*contd.*		
Death rates under 1 year :		
Age and sex, 1948 and 1949 ..	24	—
With pneumonia :—		
1936–39, 1940 to 1949	32	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Death rates under 4 weeks :		
1936–39, 1940 to 1949	32	—
Death rates 1–4 years :		
with pneumonia—		
1911–20, 1921 to 1949	47	—
Bronchitis, acute (106a)	—	c, 8
Bronchitis, chronic (106b)	—	c, 8
Broncho-pneumonia (see **Pneumonia**)		
Buccal cavity, pharynx and tonsils, diseases of (115)	206	c
Death rates :		
Age and sex, 1931–49	206	—
Pharynx and tonsils (115b, c)		
Ages 1–4, 1936–39, 1941 to 1949	48	—
Calculi, biliary (126)	—	c
Calculi of urinary passages (134) ..	—	c
Cancer and other tumours (45–57) ..	—	c
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949..	53	—
Cancer and other malignant tumours (45–55)	134	c, 8, 9, 22, 24†, App. A
Deaths :		
Ages 1–14 and sex, 1939 and 1949..	54	—
Age, sex and site, 1948 and 1949 ..	140, 144	—
Sex, site and type, 1948 and 1949 ..	136, 138	—
Death rates :		
Age and sex, 1936–49	135	—
Age and sex (excluding lung and bronchus), 1936–1949	150	—
Age and sex shown as percentages of rates in previous years, 1931–49..	148	—
Ages 1–4, 1936–39, 1941 to 1949 ..	48	—
Ages 1–14 and sex, 1939 and 1949 ..	54	—
Ages 15–24, 25–49, 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over, 1936–38, 1947 to 1949 ..	62	—
C.M.I's. by sex, 1938 to 1949 ..	149	—
Regions, age and sex, 1949 ..	159	—
Sites, age and sex, 1911–49.. ..	152	—
Adrenal glands (55a)	137, 141	b
§‡Bladder, urethra, ureter (52 pt.) ..	137, 141, 155	—
‡Bones (55b)	139, 156	c
§‡Brain and other parts of nervous system (54)	137, 156, 167	c, 8
§Glioma (54a)	141, 168	c
Sarcoma (54b)	168	a
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
§‡Breast (50)	137, 141, 155	c, 8, 24†
Death rates of females :		
Age and marital condition, 1948–49	165	—
Age and fertility, 1948–49 ..	165	—
Regions by age, 1949	161	—
Regions by age per 1,000 total cancer deaths, 1940–49 ..	163	—
Cancer and other malignant tumours (45–55)—*contd.*		
Bronchus (see Lung, bronchus and pleura)		
§Buccal cavity and pharynx (45) (see Mouth and Œsophagus)		
Cæcum (46c, pt.)	136, 140	—
Colon (46c, pt.)	136, 140	—
Digestive organs and peritoneum (46)	—	c, 8
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
Duodenum (46b, pt.)	136, 140, 160	—
Ethmoid, nose	137, 141	—
§‡Gall bladder and ducts (46e, pt.) ..	136, 140, 153	—
Genital organs, female (except uterus) (49)	155	c, 8
Death rates :		
Age and fertility, 1948–49 ..	165	—
Age and marital condition, 1948–49	165	—
Genital organs, male (51)	137, 141, 155	c, 8
Glioma of brain and nervous system (see Brain)		
Hepatic and splenic flexures (46c, pt.)	136, 140	—
§‡Intestines other than duodenum or rectum (46c)	136, 140	c
Jaw (45c, pt.)	136, 140, 152	—
§‡Kidney (52 pt.)	137, 141, 155	—
Large intestines (see Colon)		
§‡Larynx and trachea (47a)	136, 141, 154	c
§‡Lips (45a)	136, 140, 152	c
§‡Liver (46c, pt.)	136, 140, 153	—
Liver and biliary passages (46e, pt.)	136, 140	c
Lung and pleura (47b)..	157	c, 24A†
§‡Lung, bronchus and pleura (47b, pt.)..	136, 141, 154	—
(See also Mediastinum, excluded here)		
§‡Mediastinum (47b, pt.)	136, 141, 154	—
Mouth (45c, pt.)	136, 140	—
Mouth and Œsophagus (45, 46a) ..	—	24† (Males) 24A† (Females)
Death rates : regions, by sex per 1,000 deaths from all cancers, 1940–49	162	—
‡Mouth and tonsil	152	—
Nose and nasal cavity (55d : 1) ..	137, 141	a
§‡Œsophagus (46a)	136, 140, 153	c
§‡Ovary and Fallopian tube (49, pt.) ..	137, 143, 155	—
§‡Pancreas (46f)	136, 140, 154	c
‡Penis (51c, pt.)	137, 141, 155	—
‡Peritoneum (46g)	136, 140, 154	c
‡Pharynx (45c, pt.)	136, 140, 152	—
Pleura (see Lung, bronchus and pleura)		
§‡Prostate (51b)	137, 141, 154	c
§‡Rectum (46d)	136, 140, 153	c
Respiratory system (47)	—	c, 8, 24A†

* See list of general tables at head of index.

† See also Appendix table showing distribution by *Standard* regions.

§ Numbers of deaths in 1948 and 1949 are given, or can be aggregated, (1) in Table LXXXVI by sex and type of cancer and are expressed as percentages of all cancer deaths), and (2) in Table LXXXVII by sex at 15 groups of ages.

‡ Death rates are given by age and sex in Table XC for 1911–49.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Cancer and other malignant tumours (45-55)—*contd.*		
Respiratory System—*contd.*		
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
Death rates : regions, by sex per 1,000 deaths from all cancers, 1940–49	163	—
Scrotum (51a)	137, 141	c
Sigmoid flexure (46c, pt.)	136, 140	—
§‡Skin (53)	137, 141, 155	c, 8
Small intestine (46c, pt.)	136, 140	—
Stomach (46b, pt.)	136, 140	—
§‡Stomach and duodenum (46b)	153	c, 24†
Death rates :		
Regions by age and sex, 1949	160	—
Regions by age and sex per 1,000 deaths from all cancers, 1940–49	162	—
§‡Testis (51c)	137, 141, 155	c
§‡Thyroid gland (55c)	137, 141, 156	—
§‡Tongue (45b)	136, 140, 152	c
Tonsil (45c, pt.)	136, 140	—
Urinary organs (52)	137, 141	c, 8
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
§‡Uterus (48)	154, 164–166	c, 8, 24†
Death rates :		
Age and fertility, 1948–49	165	—
Age and marital condition, 1948–49	165	—
Regions by age, 1949	161	—
Regions by age per 1,000 total cancer deaths, 1940–49	164	—
Uterus, cervix (48a)	137, 139, 147	c
Uterus, corpus (48b, pt.)	137, 139, 147	—
Uterus, not defined as cervix (48b)	137, 139, 144	—
Death rates :		
Age and fertility, 1948–49	166	—
§‡Vulva and vagina (49, pt.)	137, 143, 155	—
Carbuncle, boils (151)	—	c
Carcinoma (see **Cancer**)		
Cardiovascular degeneration (93c : 1)	193	c
Death rates : age and sex, 1931 to 1949	194	—
Cellulitis, acute abscess (152)	—	c, 22
¶Central nervous system, vascular lesions of	197	—
Deaths : ages 45–54, 55–64, 65–74, by Social Class, 1949	200	—
Cerebral embolism, thrombosis and softening (83b, c)	—	c
Death rates : age and sex, 1931 to 1949	187	—
Cerebral hæmorrhage (83a)	188	c
Death rates : age and sex with C.M.I's., 1931–49	187	—
Cerebro-spinal (meningococcal) meningitis (6)	70	c, 8, 9, 10, 11, 12, 15†, 22, 24†, 26–29, App. A
Death rates :		
Age and sex, 1911–49, with C.M.I's.	71	—
Ages 1–4, 1911–20, 1921 to 1949	47	—
Ages 5–9, 10–14, 1936–39, 1941 to 1949 (with non-meningococcal meningitis (81))	50	—
Cerebro-spinal—*contd.*		
Notifications :		
1939 to 1949	72	—
Degree of diagnosis correction by regions 1946–47, 1948 and 1949	68	—
Notification rates :		
1931 to 1949	72	—
Age and sex, 1948 and 1949	73	—
Regions, 1946 to 1949	72	—
Fatality rates :		
1931 to 1949	72	—
Age and sex, 1948 and 1949	73	—
Regions, 1946 to 1949	72	—
Chickenpox (see **Varicella**)		
Childbearing (see **Pregnancy, childbearing, etc.**)		
Cholecystitis without record of biliary calculi (127a)	—	c
Cholera (4)	—	a
Chorea (87a)	—	b
Age and sex, 1948 and 1949	170	—
Circulatory system, diseases of (90–103)	—	c, 24†
Deaths : age and social class, 1949	200	—
Deaths and death rates :		
Ages 1–14 by sex, 1939 and 1949	53	—
Cirrhosis of liver (124) (with and without mention of alcoholism)	184	c, 24A†
Cirrhosis and other diseases of the liver (124, 125)	—	c, 22
Cleft palate, harelip (157f)	—	b, 22
Congestion of lungs (see **Lungs**)		
Continued fever (see **Fever**)		
Convulsions in children under 5 years of age (86)	186	b, 11, 12, 15† 22
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949	48	—
Ages under 1 year :		
1936–39, 1940 to 1949	32	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Coronary arteries, diseases of, angina pectoris (94)	193	c, 24A
Deaths : Age and social class, 1949	200	—
Death rates : age and sex, 1931 to 1949	194	—
Coronary disease (94a)		
With myocardial degeneration and arterio-sclerosis :—		
Death rates :		
Ages 15–24, 25–49 by sex 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over by sex, 1936–38, 1947, 1948 and 1949	62	—
Cretinism (see **Myxœdema and cretinism**)		
Cystic disease of kidney (157h)	—	b, 22
Cystitis of the bladder (135a)	—	c
Debility, congenital (158)	—	b, 11 12, 13 15†, 2
Death rates under 1 year :		
Age and sex, 1948 and 1949	24, 25	—
Regions, 1948 and 1949	27	—

* See list of general tables at head of index.

† See also Appendix table showing distribution by *Standard* regions.

§ Numbers of deaths in 1948 and 1949 are given, or can be aggregated, (1) in Table LXXXVI by sex and type of can (and are expressed as percentages of all cancer deaths), and (2) in Table LXXXVII by sex at 15 groups of ages.

‡ Death rates are given by age and sex in Table XC for 1911–49.

¶ Nos. 330–334 in the 6th (1948) Revision of the International List.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
ebility, congenital (158)—*contd.*		
Death rates under 4 weeks :		
1936–39, 1940 to 1949	32	—
iabetes mellitus (61)	175	c, 8, 9, 24† App. A
Deaths and death rates :		
Ages 1–14 by sex, 1939 and 1949 ..	54	—
Death rates :		
Age and sex with C.M.I's., 1931 to 1949	174	—
Age and sex expressed as percentages of previous periods, 1923–49 ..	175	—
Ages 15–24, 25–49 by sex, 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Regions, ages 45–64, 65 and over by sex, 1949	176	—
iarrhœa (see **Enteritis**)		
igestive system, diseases of (115–129)	206	c, 8, 24†
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	53	—
Death rates :		
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
iphtheria (10)	78	c, 8, 9, 10, 11, 12, 22, 24†, 26–29
Deaths and death rates :		
Ages 1–4, by sex, 1939 and 1949 ..	54	—
Death rates :		
Age, 1906–49	81	—
Ages 1–4, 1911–20, 1921 to 1949 ..	47	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949	50	—
Regions at ages 0–4, 5–14, 1938–49..	82	—
Notifications :		
In 25 large towns, corrected and uncorrected, 1948 and 1949.. ..	83	—
Degree of diagnosis correction, by regions, 1946–47, 1948 and 1949..	68	—
Notification rates :		
Age and sex, 1946 to 1949	80	—
Regions (at ages 0–4 and 5–14), 1946 to 1949	79	—
In 25 large towns, corrected and uncorrected, 1948 and 1949 ..	83	—
Fatality rates :		
Age and sex, 1946 to 1949	80	—
Regions, 1940–49	79	—
Immunisation	354	—
iverticulitis (123a)	—	c
uodenum, ulcer of (117b)	207	c, 8, 24†
Death rates :		
Age and sex with C.M.I's., 1931–49	207	—
Ages 45–64, 65 and over, sex, region, 1949	209	—
ysentery (27)	111	b, 22
Deaths :		
According to type, 1931 to 1949 ..	111	—
Notifications :		
Numbers and ratio to deaths, 1931 to 1949	111	—
Degree of diagnosis correction, by regions, 1946–7, 1948 and 1949 ..	68	—
Notification rates :		
Age and sex, 1946 to 1949	112	—
Fatality rates :		
Age and sex, 1946 to 1949	112	—

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Ear and mastoid antrum, diseases of (89)	190	c, 8, 11, 12, 22, 24A†
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	55	—
Death rates :		
Age and sex with C.M.Is., 1931–35, 1936 to 1949	190	—
Ages 1–4, 1936–39, 1941 to 1949 ..	48	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949	50	—
Eclampsia of pregnancy ; Eclampsia, puerperal ; Ectopic gestation (see **Pregnancy, childbearing, etc.**)		
Emphysema, pulmonary (113)	—	c
Empyema (110a)	—	c, 22
Encephalitis, acute infectious (lethargic or epidemic) (37)	132	c, 8, 22, 24†, 28, 28A†, 29
Deaths : according to type, 1931 to 1949	132	—
Notifications : 1931 to 1949	132	—
Encephalitis, post vaccinal (see **Accidental deaths**—vaccinia, etc.)		
Encephalitis (non-epidemic)	—	c, 22
Endocarditis acute (91)	—	c, 8
Endocarditis, rheumatic origin		
Death rates :		
Age and sex, 1940–49	172	—
Endocarditis, unspecified		
Death rates :		
Age and sex, 1940–49	172	—
Enteritis and diarrhœa (119, 120) ..	210	c, 22
Death rates :		
Age and sex with C.M.I's., 1931–49..	210	—
Ages 1–4, 1911–20, 1921 to 1949 ..	47	—
Enteritis and diarrhœa (under two years) (119)	210	10, 11, 12, 13A, 15†, 24†
Death rates under 1 year :		
1861–1945, 1931 to 1949	33	—
1936–39, 1940 to 1949	32	—
Age and sex, 1948 and 1949 ..	24, 25	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Death rates under 4 weeks :		
1936–39, 1940 to 1949	32	—
Epilepsy (85)	—	c, 22
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949 ..	48	—
Erysipelas (11)	84	c, 8, 11, 22, 24A†, 26, 28, 28A†, 29
Deaths : 1923–49	84	—
Notifications : 1923–49	84	—
Notification rates : Age and sex, 1946 to 1949	85	—
Fatality rates :		
1923–49	84	—
Age and sex, 1946 to 1949	85	—
Erythrocytosis (76b)	—	a

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Executions, legal (198)	—	a
Exophthalmic goitre (see **Goitre**)		
Fallopian tubes, diseases of (139a : 2)	—	a, 7
Fatty degeneration of heart (see **Myocardial degeneration described as fatty**)		
Fever, continued (200a : 2, pt.)	—	28
Fever, paratyphoid (2)	68	b, 26–29
Notifications :		
Degree of diagnosis revision by regions, 1946–47, 1948 and 1949	68	—
Notification rates :		
Age and sex, 1946 to 1949	70	—
Regions, 1946 to 1949	69	—
Fatality rates :		
Age, 1946 to 1949	70	—
Density aggregates, 1946 to 1949	69	—
Fever, puerperal and pyrexia (see **Pregnancy, childbearing, etc.**)		
Fever, relapsing (31)	—	b, 28
Fever, rheumatic (58)	168	c, 8, 22, 24A†
Deaths : age and sex, 1948 and 1949	170	—
Deaths and death rates :		
Ages 1–14 by sex, 1939 and 1949	55	—
Death rates :		
Age and sex, with and without mention of heart, 1942 to 1949	169	—
Ages 1–4, 1936–39, 1941 to 1949	48	—
With endocarditis :		
Death rates :		
Ages 5–9, 10–14, by sex, 1936–39, 1943 to 1949	50	—
Fever, scarlet (8)	73	c, 8, 9, 10, 22, 24†, 26–29
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949	54	—
Death rates :		
Ages 1–4, 1911–20, 1921 to 1949	47	—
Notification rates :		
Age and sex, 1946 to 1949	75	—
Regions, ages 0–4 and 5–14, 1946 to 1949	74	—
Fatality rates :		
Age and sex, 1946 to 1949	75	—
Regions, 1940–49	74	—
Fever, typhoid (1)	68	b, 26–29
Notifications :		
Degree of diagnosis revision, by regions, 1946–47, 1948 and 1949	68	—
Notification rates :		
Age and sex, 1946 to 1949	70	—
Regions, 1946 to 1949	69	—
Fatality rates :		
Age, 1946 to 1949	70	—
Density aggregates, 1946 to 1949	69	—
Fevers, typhoid and paratyphoid (1, 2) (see also **Fever, typhoid** and **Fever, paratyphoid**)	68	c, 8, 9, 10, 24†, 26–29
Fever, undulant (brucellosis) (5)	—	b
Fever, yellow (38a)	—	a
Fossæ, nasal and annexa, diseases of (104)	—	c
Gangrene (98)	—	c
Gas gangrene (24a)	—	a
Gastritis (see **Stomach, inflammation of the**)		
General paralysis of the insane (30b)	112	c
Death rates :		
Age and sex, 1940–45, 1948 and 1949	113	—
Sex, 1931 to 1949	113	—
Genital organs, female, diseases of (139)	—	c
Genital organs, male (except prostate) diseases of (138)	—	b
German Measles (38d)	—	b, 22
Glands, diseases of (see under name of gland)		
Glioma (not specified as benign) (see under **Cancer, etc.**)		
Goitre, exophthalmic (63b)	177	c, 8, 24A†
Death rates :		
Age and sex with C.M.I's., 1931 to 1949	177	—
Regions by sex, 1947 and 1949	178	—
Goitre, simple (63a)	—	c
Gonococcal infections (25)	—	b, 22
Gout (60)	—	b
Hæmolytic disease of newborn (161e : 1)	—	b, 11, 12, 13A, 22, 24A†
Death rates under 1 year :		
1936–39, 1940 to 1949	32	—
Age and sex, 1948 and 1949	24	—
Legitimacy and sex, 1948 and 1949	26	—
Death rates under 4 weeks :		
1940 to 1949	32	—
Hæmophilia (72b)	—	b, 22
Hæmorrhage, cerebral (see **Cerebral hæmorrhage**)		
Hæmorrhagic conditions (72)	—	c, 11, 12
Heart, congenital malformations of (157c)	—	c, 22
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	55	—
Heart disease (90–95)	191	c, 8, 22 24† App. A
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	55	—
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949	48	—
C.M.I's. by sex, 1901 to 1949	191	—
Heart disease, degenerative, with senility (93c, d ; 94 ; 162a, c)	193	—
Death rates :		
Age and sex, 1931 to 1949	194	—
Heart disease, functional (without organic lesions) (95a)	—	c
Heart disease specified as rheumatic but otherwise ill-defined (95b)	—	c
Age and sex, 1948 and 1949	171	—
Heart failure (200a : 1)	—	b
Helminths, diseases due to (40–42)	—	b

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Hemiplegia and other paralyses of unstated origin (83d)	—	c
Death rates : Age and sex with C.M.I's., 1931–49 (including 83a, cerebral effusions of unstated origin)	188	—
Hernia (122a)	—	c, 22
Hernia, intestinal obstruction (122)	—	c, 11, 12, 22
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	55	—
Death rates : ages 1–4, 1936–39, 1941 to 1949	48	—
Herpes zoster (38c)	—	b
Hodgkin's disease (see **Pernicious lymphogranulomatosis**)		
Homicide (165–168)	—	c, 22, 25
Hydatid disease (41)	—	b
Hydrocephalus, congenital (157a)	—	c, 22
Hypertensive disease *Deaths :* by age and social class	201	—
Idiopathic steatorrhœa (see **Steatorrhœa**)		
Ileus, paralytic, without stated cause (122b : 2)	—	b
Ill-defined causes of death (199, 200)	260	c, 24A†
Indefinitely certified causes of death, inquiries respecting	262	—
Infanticide (Infants under 1 year)	—	b, 25
Infants under one year, diseases peculiar to (158–161)	—	b, 11 12, 13A
Death rates : sex and age, 1948 and 1949	24, 25	—
Infarction, hæmorrhagic of lung (111a) (see **Lung, congestion, etc.**)	—	
Infections, gonococcal (25)	—	b
Infections of the newborn (161c)	—	b
Death rates under 1 year : age and sex, 1948 and 1949	24, 25	—
Infection, purulent, and septicæmia (24)	—	c
Infective diseases other than tuberculosis (1–12, 23–44)	—	b, 11, 12, 15†
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	54	—
Death rates : Ages 15–24, 25–49, 1936–38, 1948 and 1949	59	—
Infective and parasitic diseases (1–44)	—	c, 11, 12, 15†
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	53	—
Death rates : Under 4 weeks, 1936–39, 1940 to 1949	32	—
Influenza (33)	115	c, 8, 9, 11, 12, 22, 24† App. A
Influenza (33)—*contd.*		
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	54	—
Death rates : Ages 1–4, 1911–20, 1921 to 1949	47	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
S.M.R's. in quarters, with variations in air temperatures, 1921 to 1949	116	—
Regions, ages 45 and over and sex, 1948 and 1949	117	—
Injury at birth (see **Birth injury, at**)		
Intestinal obstruction (122b)	—	c, 8, 22
Intestines, diseases of, except hernia and obstruction (123)	—	c
Intoxication due to maternal toxæmia (161b)	—	b, 13A, 22
Death rates under 1 year : age and sex, 1948 and 1949	24, 25	—
Intra-cranial lesions of vascular origin (83)	186	c, 8, 24†, App. A
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	55	—
Death rates : Age and sex, 1931–49	187	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Regions, by ages 45 and over, and sex, 1949	189	—
Intussusception (122b : 1)	—	c
Joints and other organs of movement, diseases of (156)	—	c
Kidney, cystic disease of (157h)	—	b, 22
Larynx, diseases of the (105)	—	c, 22
Death rates : ages 1–4, 1936–39, 1941 to 1949	48	—
Lead poisoning (78)	—	b
Leprosy (23)	—	b
Leukæmia and aleukæmia (74)	182	c, 8, 22
Deaths and death rates : Ages 1–14 and sex, 1939 and 1949	55	—
Death rates : Ages 15–24, 25–49, 1936–38, 1948 and 1949	59	—
Age and sex with C.M.I's., 1931 to 1949	183	—
Locomotor ataxia (30a)	—	c
Death rates : Age and sex, 1940–45, 1948 and 1949	113	—
Sex, 1931 to 1949	113	—
Lung, abscess of (114d)	—	c
Lung, congestion, œdema, hæmorrhagic infarction, and thrombosis of (111)	—	c, 8, 22
Lung, gangrene of (114c)	—	b
Lymphatic system, diseases of (101)	—	b
Lymphogranulomatosis, pernicious (see **Pernicious lymphogranulomatosis**)		
Lymphosarcoma (see **Cancer**)		
Malaria (28)	—	b, 28‡

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.
‡ Notifications of cases contracted in England and Wales.
§ Nos. 440–447 in the 6th (1948) Revision of the International List.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Malformations, congenital (157) ..	—	c, 11, 12, 13A, 15†, 22, 24A†
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949 ..	53	—
Death rates under 1 year :		
1936–39, 1940 to 1949	32	—
Age and sex, 1948 and 1949 ..	24, 25	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Death rates under 4 weeks :		
1936–39, 1940 to 1949	32	—
Death rates :		
Ages 1–4, 1936–39, 1940 to 1949 ..	48	—
Mastitis during the puerperium and lactation (see **Pregnancy, Childbearing, etc.**)		
Maternal causes (excluding abortion) (142-150)	213	c, 24A†
Deaths and death rates : (see **Pregnancy, childbearing, etc.**)		
Measles (35)	117	c, 8, 9, 10, 11, 12, 15†, 22, 24†, 26–29
Deaths :		
Ages 1–14 and sex, 1939 and 1949	54	—
By Quarters, 1944 to 1949	117	—
Death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
Ages 1–4, 1911–20, 1921 to 1949 ..	47	—
Regions, at ages 0–4, 1948 and 1949	119	—
Death rates under 1 year :		
1936–39, 1940 to 1949	32	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Notification rates :		
Age and sex, 1946 to 1949	118	—
Regions, ages 0–4, 5–14, 1948 and 1949	119	—
Fatality rates :		
Age and sex, 1946 to 1949	118	—
Regions, at ages 0–4, 1948 and 1949	119	—
Medulla and spinal cord, diseases of the (82)	—	c
Melæna neonatorum (161d)	—	b, 11, 12, 13A, 22
Death rates under 1 year :		
Age and sex, 1948 and 1949 ..	24	—
Meningitis (non-meningococcal) (81) ..	—	c, 8, 11, 12, 22
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949 ..	48	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949 (with meningococcal meningitis (6))	50	—
Mental disorders and deficiency (84) ..	—	c
Mitral valve, diseases of the (92b : 1) ..	—	c
Age and sex, 1948 and 1949	170	—
Monstrosities (157d)	—	b, 22
Mumps (44c)	—	b
Mycosis (43)	—	b

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Myocardial degeneration (93c)	193	c, 24A†
¶*Deaths :* Age and social class ..	201	—
With coronary disease and senility :—		
Death rates :		
Ages 15–24, 25–49, 1936–38, 1948 and 1949	59	—
Ages 50 and over, 1936–38, 1947 to 1949	62	—
Myocardial degeneration described as fatty (93c : 2)	193	c
Myocarditis, acute (93a)	—	c
Myocarditis chronic, specified as rheumatic (93b)	—	c
Age and sex, 1948 and 1949	170	—
Myocardium, diseases of the (93) ..	192, 193	c, 8
Myxœdema and cretinism (63c)	—	c
Nasal fossæ and annexa, diseases of the (104)	—	c
Nephritis (130–132)	210	c, 8, 22, 24†, App. A
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	55	—
Death rates :		
Age, sex and type, 1931–49 ..	211	—
Ages 45 and over, sex and region, 1949	212	—
Ages 1–4 (acute nephritis), 1936–39, 1941 to 1949	48	—
Note : C.M.I's. (Table 8) are given according to whether acute, chronic or unspecified.		
Nervous system and sense organs, diseases of (80–89)	—	c
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	53	—
Œsophagus, diseases of the (116) ..	—	b
Old age (see **Senility, old age**)		
Ophthalmia neonatorum (25, pt.) ..	—	28, 29
Osteomalacia (66a)	—	a
Osteomyelitis and periostitis (154) ..	—	c, 8, 22
Ovaries, etc., diseases of the (139a) ..	—	c
Palate, cleft, harelip (see **Cleft palate, harelip**)		
Pancreas, diseases of the (other than diabetes) (128)	—	c
Paralysis agitans (87c)	—	c, 8, 24A†
Paratyphoid fever (see **Fever**)		
Pellagra (69)	—	b
Pemphigus neonatorum (161c : 2) ..	—	b, 11, 12, 13A, 22
Death rates under 1 year : age and sex, 1948 and 1949	24	—
Pericarditis (90)	—	c
Deaths :		
By sex, 1931, 1940 and 1949 ..	192	—
Pericarditis, chronic rheumatic (90a) ..	—	b
Age and sex, 1948 and 1949	170	—

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.
¶ According to 6th (1948) Revision of International List.

Diseases, Causes of death and International List Nos.	Text Volume Page No.	Part I Table No.*
ernicious anæmia (see **Anæmia, pernicious**)		
ernicious lymphogranulomatosis (Hodgkin's disease) (44b)	132	c, 8, 24A†
Deaths :		
Regions by sex, 1948 and 1949 ..	134	—
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	54	—
Death rates :		
Age and sex, 1911–49	133	—
Regions by sex, 1948 and 1949 ..	134	—
harynx, diseases of (see **Buccal cavity**)		
hthisis (see **Tuberculosis, respiratory**)		
ink disease (66b : 1)	180	b, 22
ituitary gland, diseases of (62) ..	—	b
lacenta prævia (see **Pregnancy, childbearing, etc.**) ..		
leurisy (110)	—	c, 8, 22
neumonia (107–109)	202	c, 8, 9, 11, 12, 13A, 15†, 22, 24†, 28, 28A†
Death and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	55	—
Death rates :		
Under 4 weeks, 1936–39, 1940 to 1949	32	—
Ages under 1 year, by sex, 1948 and 1949	24, 25	—
Ages 5–9, 10–14, by sex, 1936–39, 1943 to 1949	50	—
Ages 15–24, 25–49, by sex, 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–39, 1947 to 1949	62	—
Proportion of 1938 death rates, March and December quarters, 1921 to 1949	116	—
Regions, age and sex, 1949.. ..	205	—
Type, age and sex with C.M.I's., 1931 to 1949	203	—
oisoning, chronic and intoxication (77–79)	—	c
oliomyelitis and polioencephalitis, acute (36)	120	c, 8, 9, 22, 24†, 26–29
Deaths :		
Age and quarters, 1948 and 1949 ..	123	—
Regions, county boroughs and administrative counties, by age, 1949	125	—
Separately, 1931 to 1949	120	—
Separately, by age and sex, 1948 and 1949	121	—
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	54	—
Death rates :		
Age, 1948 and 1949	121	—
Ages under 15 and all ages, 1931 to 1949	120	—
Density aggregates, by age and sex, 1948 and 1949	122	—
Regions, county boroughs and administrative counties, at ages under 15 and all ages, 1949 ..	125	—
Poliomyelitis and polioencephalitis, acute (36)—*contd.*		
Notifications :		
Age and quarters, 1948 and 1949 ..	123	—
Degree of diagnosis correction, by regions, 1946–47, 1948 and 1949..	68	—
Regions, county boroughs, and administrative counties by age, 1949	125	—
Separately, 1931 to 1949	120	—
Separately, by age and sex, 1948 and 1949	121	—
Notification rates :		
Age, 1948 and 1949	121	—
Density aggregates, by age and sex, 1948 and 1949	122	—
Regions, county boroughs and administrative counties, at ages under 15 and all ages, 1949 ..	125	—
Fatality rates :		
Age, 1948 and 1949	121	—
Density aggregates, by age and sex, 1948 and 1949	122	—
Pregnancy, childbirth and the puerperal state (140–150)	213	c, 10‡, 24†, 24A†
Deaths :		
Abortion, attributed to, or associated with, 1928 to 1949	214	—
Associated with, but not attributed to, by cause and age, 1948 and1949	221, 222	—
Cæsarean section mentioned, by cause, 1940 to 1949	223	—
Maternal causes (142–150) by civil condition and by age, 1940 to 1949	214	—
Outcome of pregnancy and number of previous pregnancies (married women only), 1948 and 1949 ..	226	—
Outcome of pregnancy by civil condition, age and cause, 1948 and 1949	224, 225	—
Pregnancy and childbirth (including) abortion) by age, by civil condition and for all sub-divisions of the International List, 1948 and 1949	218	—
Death rates :		
Abortion, attributed to, or associated with, 1928 to 1949.. ..	215	—
Abortion, regions, 1948 and 1949 ..	227	—
Childbirth (146–150) by cause and age, 1948–1949 (deaths related to maternities)	220	—
Maternal, regions, 1948 and 1949 ..	227	—
Pregnancy and childbearing, attributed to, or associated with, 1928 to 1949	215	—
Puerperal pyrexia :	—	26, 28
Case rates, and ratios of cases to sepsis deaths by regions, 1948 and 1949	227	—
Premature birth (159)	—	b, 11, 12, 13A, 15†, 22, 24†
Death rates under 1 year :		
1936–39, 1940 to 1949	32	—
Age and sex, 1948 and 1949 ..	24, 25	—
Legitimacy and sex, 1948 and 1949..	26	—
Regions, 1948 and 1949	27	—
Death rates under 4 weeks :		
1936–39, 1940 to 1949	32	—
Primary purpura (72a)	—	c, 22
Prostate, diseases of (137)	212	c, 8, 24A†
Death rates : age, with C.M.I's., 1931 to 1949	213	—

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.
‡ Excluding abortion.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Protozoa, diseases due to (28–29) ..	—	b
Psychoses, puerperal (see **Pregnancy, childbirth, etc.**)		
Puerperal fever and pyrexia (see **Pregnancy, childbirth, etc.**)		
Purulent infection and septicæmia (24) ..	—	c, 22, 24A†
Pustule and anthrax, malignant (7) ..	—	b
Pyæmia (24b)	—	a
Pyelitis, pyelonephritis and pyelocystitis (133a)	—	c, 22
Pyloric stenosis, congenital (157e) ..	—	c, 22
Rabies (38b)	—	a
Relapsing fever (see **Fever**)		
Respiratory system, diseases of (104–114)	—	c, 8, 11, 12, 24†
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	53	—
Death rates under 1 year : 1861–1945, 1931 to 1949 (including influenza (33))	33	—
Rheumatic Fever (see **Fever**)		
Rheumatic origin, heart diseases of :		
Death rates :		
Age and sex, 1940–49	172	—
Rheumatism and other general diseases (58–71)	172	c
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949	53	—
Rheumatoid arthritis and other chronic articular rheumatism :		
Death rates :		
Age and sex, 1939 to 1949	173	—
Rickets (70)	180	b, 22
Death rates : ages 1–4, 1936–39, 1941 to 1949	48	—
Rubella (see **German measles**)		
Sarcoma (see **Cancer**)		
Scarlet Fever (see **Fever**)		
Sclerosis, disseminated (87d)	—	c, 8
Scurvy (67)	—	b, 22
Senility, old age (162)	193	c, 8, 24A†
With degenerative heart disease ..	193	—
With myocardial degeneration :		
Death rates :		
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Septicæmia (24a)	—	c
Septic sore throat (115b)	—	c, 22
Silicosis and other occupational pneumonoconioses (114a)	205	c
Deaths : males by age, 1939 to 1949..	206	—
Skin and cellular tissue, diseases of the (151–153)	—	c, 22
Smallpox (34)	—	b, 24A†

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Spina bifida and meningocele (157b) ..	—	c, 22
Spinal cord and medulla, diseases of the (82)	—	c
Spirochætosisictero - hæmorrhagica (Weil's disease) (32a)	115	b
Deaths : age and sex, 1931–1949 ..	115	—
Spleen, diseases of the (75)	—	c
Steatorrhœa, idiopathic (66b : 2) ..	180	b
Stomach, inflammation of (118 : 1) ..	207	c, 11, 12, 22
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949 ..	48	—
Age and sex with C.M.I's., 1931–49..	208	—
Stomach, ulcer of (117a)	207	c, 8, 24†
Death rates :		
Age and sex with C.M.Is., 1931–49..	207	—
Ages 45–64, 65 and over, sex and region, 1949	209	—
Sudden death (199)	260	c
Suicide (163, 164)	228	c, 8, 24†, 25
Deaths :		
Methods, by age and sex, with proportional distribution, 1949 ..	233	—
Month of occurrence by sex, 1940 to 1949	230	—
Regions, method and sex, with proportional distribution, 1948 and 1949	234, 235	—
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949 ..	55	—
Death rates :		
Age and sex, 1861-1949, with C.M.I's. from 1931	229	—
Region, age and sex, 1947 to 1949 in descending order of magnitude..	231	—
Syphilis (30)	112	c, 8, 9, 24† App. A
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949	54	—
Death rates :		
Age, sex, and various forms, 1940–45, 1948 and 1949	113	—
Region, ages 45–64, 65 and over, 1948 and 1949	114	—
Sex, and various forms, 1931 to 1949 with C.M.I's.	113	—
Syphilis, congenital (30d : a)	—	c, 11, 12, 22
Death rates : (see various forms above)		
Teeth and gums, diseases of the (115a) ..	—	c, 22
Tetanus (12)	86	b
Deaths :		
Regions, age and sex, 1940–49 ..	85	—
Thymus, diseases of (including status lymphaticus) (64)	—	b, 22
Deaths : by age and sex from status lymphaticus and enlarged thymus, 1948–49	179	—
Thyroid and parathyroid glands, diseases of (63)	—	c
Tonsils (see **Buccal cavity**, etc.)		
Toxæmia of pregnancy, etc. (see **Pregnancy, childbirth, etc.**)		

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Tuberculosis, all forms (13–22)	86	c, 8, 9, 10, 11, 12, 15†, 22, 24†
Deaths :		
Quarterly occurrence by sex, 1945 to 1949	86	—
Deaths and death rates :		
Ages 1–14, by sex, 1939 and 1949	54	—
Death rates :		
Ages under 1 year—		
1936–39, 1940 to 1949	32	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Ages 1–4, 1936–39, 1941 to 1949	48	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949	50	—
Ages 15–24, 25–49, by sex, 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
C.M.I's., by sex, 1931 to 1949	90	—
Tuberculosis of various sites :		
Bones and joints (excluding vertebral column) (17)	—	c
Disseminated (22)	—	c
Genito-urinary system (20)	—	c
Intestines and peritoneum (15)	—	c, 8, 11, 12, 22
Death rates :		
Ages 1–4, 1936–39, 1941 to 1949	48	—
C.M.I's. by sex, 1931 to 1949	90	—
Lymphatic system (19)	—	b
Meninges and C.N.S. (14)	—	c, 8, 11, 12,22
Death rates :		
Ages 1–4 years—		
1911–20, 1921 to 1949	47	—
1936-39, 1941 to 1949	48	—
Age and sex, 1931 to 1949	89	—
C.M.I's. by sex, 1931 to 1949	90	—
Counties, E.A.D.R. under 15, 1948 and 1949	109, 110	—
Regions, age and sex, 1948 and 1949	107, 108	—
Non-respiratory (14–22)	—	b, 24†, App. A
Death rates : (for groups other than meninges and C.N.S.)		
Age and sex, 1931 to 1949	89	—
Counties, E.A.D.R. under 15, 1948 and 1949	109, 110	—
Regions, age and sex, 1948 and 1949	107, 108	—
Respiratory system (13)	86	c, 8, 9, 10, 22, 24†, App. A
Deaths :		
Counties by sex—		
Ages 15–44, 1949	102	—
Ages 45–64, 65 and over, 1949	106	—
Death rates :		
Age and sex, 1931–35, 1936 to 1949	87	—
Ages 1–4, 1936–39, 1941 to 1949	48	—
Ages 15–44, counties, 1949	102	—
C.M.I's. by sex, 1931 to 1949	90	—
Density aggregates, age and sex, 1931, 1938 and 1949	95	—
Large Counties, by sex, ages 15 and over, 1948 and 1949	92, 93	—
Regions, age and sex, 1949	91	—
Notifications :		
Counties, by sex, at ages 15–24, 25-44, 1949	102	—
Counties, by sex, at ages 45–64, 65 and over, 1949	106	—

Diseases, Causes of death and International List Nos.	Text Volume Page No.	Part I Table No.*
Tuberculosis of various sites :—*contd.*		
Notification rates :		
Counties, ages 45–64, males only, 1949	106	—
Counties E.A.N.R., ages 15–44, 1949	106	—
Regions and counties by age and sex, 1949	99	—
Fatality rates :		
Counties, ages 15–44, 1949	102	—
Skin and subcutaneous cellular tissue (18)	—	b
Vertebræ and bones (16 and 17a), C.M.I's. by sex, 1931 to 1949	90	—
Vertebral column (16)	—	c
Tumours, malignant (see **Cancer**)		
Tumours, non-malignant (56)	—	c
Tumours of undetermined nature (57)	—	c
Typhoid fever (see **Fever**)		
Typhus and typhus-like diseases (rickettsioses) (39)	—	b, 28
Ulcer of duodenum (see **Duodenum**)		
Ulcer of stomach (see **Stomach**)		
Umbilicus, infection of (161c : 1)	—	9, 13A, 22
Death rates under 1 year : age and sex, 1948 and 1949	24	—
Undulant Fever (brucellosis) (see **Fever**)		
Unstated or ill-defined causes (200)	260	c
Urethra, diseases of, urinary abscess, etc. (136)	—	c
Urethra, stricture of (136a)	—	b, 8
Urinary and genital systems, diseases of (130–139)	—	c
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	53	—
Death rates : Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Uterus, diseases of (139b)	—	c
Vaccinia, etc. (see **Accidents**)		
Valve, mitral, disease of (92b : 1)	—	c
Age and sex, 1948 and 1949	171	—
Valves and endocardium, chronic affections of (92a)	—	c, 8, 24A†
Valvular disease, aortic (without mitral disease) (92a)	—	c
Varicella (38a)	—	b, 22
‡Vascular lesions affecting central nervous system		
Deaths : age and social class, 1949	200	—
Veins, diseases of (100)	—	c, 8
Venereal diseases (other than syphilis and gonorrhœa) (44a)	—	a

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.
‡ Nos. 330–334 in the 6th (1948) Revision of the International List.

Diseases, Causes of Death and International List Nos.	Text Volume Page No.	Part I Table No.*
Violence (163–198)	228–260	c, 8, 24†, 25
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	53	—
Death rates :		
Ages under 1 year—		
1936–39, 1940 to 1949	32	—
Regions, 1948 and 1949	27	—
Sex and legitimacy, 1948 and 1949	26	—
Ages 1–4, 1936–39, 1941 to 1949	48	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949	50	—
Ages 15–24, 25–49, 1936–38, 1948 and 1949	59	—
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Violence other than suicide or road traffic accidents	255	—
Death rates : regions and density aggregates, 1947 to 1949	256, 257	—
(See also **Accidents, Suicide** and **War operations**)		
Vision, organs of, diseases of (88)	—	b
Vitamin deficiency diseases (67–71)	—	b
War operations (196, 197)	—	c
(*Note :* 196—non-civilians, 197—civilians)		
Death rates :		
Ages under 1 year, 1936–39, 1940 to 1949	32	—
Ages 1–4, 1936–39, 1940 to 1949	48	—
Ages 5–9, 10–14, 1936–39, 1943 to 1949	50	—
War operations (196, 197)—*contd.*		
Ages 50–54, 55–64, 65–69, 70 and over, by sex, 1936–38, 1947 to 1949	62	—
Weil's disease (see **Spirochætosis icterohæmorrhagica**)		
Whooping cough (9)	76	c, 8, 9, 10, 11, 12, 15†, 22, 24†, 26–29
Deaths and death rates :		
Ages 1–14 and sex, 1939 and 1949	54	—
Death rates :		
Ages under 1 year—		
1936–39, 1940 to 1949	32	—
Legitimacy and sex, 1948 and 1949	26	—
Regions, 1948 and 1949	27	—
Ages 0–4 years—		
Regions, 1946 to 1949	77	—
Ages 1–4 years—		
1911–20, 1921 to 1949	47	—
Notification rates :		
1940 to 1949	76	—
Age and sex, 1946 to 1949	78	—
Regions, ages 0–4, 5–14, 1946 to 1949	77	—
Fatality rates :		
Age and sex, 1946 to 1949	78	—
Regions, at ages under 5, 1946 to 1949	77	—
Yellow Fever (see **Fever**)		

* See list of general tables at head of index.
† See also Appendix table showing distribution by *Standard* regions.

(55588) Wt.3328/148 K.9. 5/53 Hw.